The Thesis Committee for Melissa Lynne Murphy

Certifies that this is the approved version of the following thesis:

Identifying and Feeling Supported in a Self-Help Group: Comparing Face-to Face and Online Videoconference Meetings

APPROVED BY

SUPERVISING COMMITTEE:

Supervisor:

Keri K. Stephens

Erin Donovan-Kicken

Identifying and Feeling Supported in a Self-Help Group: Comparing Face-to Face and Online Videoconference Meetings

by

Melissa Lynne Murphy, B.A.

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Dedication

This research is dedicated to the men, women, and children directly and indirectly suffering from any "ism" that is beyond our human control. May they find the strength, experience and hope to recover among the support of others, because after all, we are all in recovery from something.

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Abstract

Identifying and Feeling Supported in a Self-Help Group: Comparing Face-to Face and Online Videoconference Meetings

Melissa Lynne Murphy, M.A.

The University of Texas at Austin, 2012

Supervisor: Keri K. Stephens

This exploratory study investigated the differences between traditional 12 step meetings and online 12 step videoconferencing meetings in a recovery-based social networking site (SNS). Drawing from a social support framework and the social identity model of deindividuation effects (SIDE), I conducted an online survey (N = 97) measuring perceptions of effectiveness, small group and relational satisfaction, identification, social support and network quality, anonymity, and access for both traditional and online videoconferencing meetings. In addition, an index was created to assess online community members' level of engagement within the SNS. Findings reveal that (a) traditional 12 step meetings rank significantly higher on perceptions of social support quality and recovery network quality, as well as overall meeting effectiveness, and small group and relational satisfaction, (b) members' perceptions of small group and relational satisfaction, social support and network quality are significant predictors of identification within a 12 step group, and lastly (c) members' level of engagement within the SNS is strongly correlated with a number of positive outcomes suggesting that the

more engaged a member is with various features within the SNS, the more social support and recovery benefits a member perceives. In sum, this study advances practical understanding of the role SNS and online videoconferencing meetings have in shaping the experiences of members in recovery. The usefulness of this study for online social support researchers as well as suggestions for future research are discussed.

Keywords: online social support; videoconferencing; social networking sites; recovery

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CHAPTER ONE

An Introduction and Study Purpose

The popularity of online health social support groups has exploded in recent years, and as a result, engendered much needed attention in the social sciences (Alexander, Wille, & Hollingshead, 2002; Braithwaite, Waldron, & Finn, 1999; Preece & Ghozati, 2001; Sullivan, 1997; Wright, 1999, 2000a, 2000b). Now more than ever, health communication is mediated through online and offline social networks (Campbell & Kelley, 2008) and this is especially true for organizations and mutual help support groups such as Weight Watchers, Alcoholics Anonymous (AA), and Gamblers Anonymous (GA). According to the Pew Internet and American Life Project (Fox, 2011), of the 74 percent of Americans who use the Internet, 80 percent have looked online for health-related information. Moreover, 25% of those adults have read someone else's commentary or experience about health or medical issues on an online news group, website, or blog (Fox, 2011). The growing number of social support groups online as well as the endless computer-mediated health spaces being accessed, such as websites, question forums and blogs, and social networking sites (SNS), continue to offer unlimited contact with a wide array of social support experiences for users. Given these trends and new advancements in technology, there are numerous opportunities for communication researchers to explore both possible disadvantages and benefits of the support process (Walther & Boyd, 2002) occurring in this online context.

Social support has been described as 'social therapy,' a process occurring in communication networks that operates for the purpose of helping people to cope with 'incongruities.' *Incongruity* is an all-encompassing term that describes situations, relationships or experiences that are atypical, which often affect a person negatively (Moss, 1973). Researchers across numerous disciplines have agreed that supportive communication is a necessary condition for quality of life and for healthful living, because supportive communication reduces stress and can help alleviate the negative effects caused by health issues (Berkman & Syme, 1979; Cassel, 1976; Cobb, 1976; Moss, 1973). Despite the tremendous potential benefits and health outcomes social support provides, researchers have just begun to explore the communicative process of social support in online support groups (Alexander, et al., 1999; Braithwaite, et al., 1999; Preece & Ghozati, 2001; Sullivan, 1997; Wright, 1999, 2000a, 2000b).

Research in the last two decades investigating online support suggests that virtual spaces offer a number of unique communication advantages such as the ability to transcend geographical constraints (Dublin, Simon, & Orem, 1997; Mickelson, 1997; Weinberg, Schmale, Uken, & Wessel, 1995), opportunities to disclose risky, often stigmatized, personal information with less risk (Braithwaite, et al., 1999; Wright, 2000a), and twenty-four hour access to information and connection from a diverse network (Rice & Katz, 2001). Additionally, research has cited facilitation of more heterogeneous supportive relationships due to reduced awareness of social status (King & Moreggi, 1998), and greater diversity in network contacts with different social, cultural, or geographic backgrounds (Rice & Katz, 2001; Wellman, 1997; Wright & Bell, 2003).

Other noted research includes affordances of anonymity, interaction management and social distance (Walther & Boyd, 2002), as well as therapeutic value of releasing health concerns in written form (Miller & Gergen, 1998). However, few research studies have investigated the newest advancements the Internet has to offer those seeking social support (Van Lear, Sheehan, Withers, & Walker, 2005) like online videoconferencing meetings. Even fewer have investigated the social support processes in these meetings in stigmatized, anonymous communities, thus, creating an opportune time for the present research.

The present study seeks to fill this gap by investigating how the availability of videoconferencing within a social networking site (SNS) might impact perceived quality and availability of social support. Drawing upon a social support framework and social identity model of deindividuation effects (SIDE) (Lea & Spears, 1992; Spears, Lea, & Postmes,1994; Postmes, Spears, & Lea, 1998; Reicher, Spears, & Postmes, 1995), as well as research on telemedicine and wired meetings, the aim of this exploratory study is to compare the perceptions of traditional and online videoconferencing meeting formats and add to the extant literature in online social support. In addition, I attempt to understand whether highly anonymous and stigmatized health groups, in this case Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) fellowships, have a unique set of social support needs, perceptions, and desired outcomes online. As such, the following research will explore health, organizational, and technology communication questions that arise from technology advancements in online social support, specifically in the context of online 12 step communities.

The inspiration for this work, and subsequently my sample, were the members of the 'addiction' social network site IntheRooms.com. *Social networking sites* (SNS) are web-based services that allow individuals to (a) construct a public or semi-public profile within an organized system, (b) articulate a list of other users with whom they share a connection, and (c) view, communicate and traverse their list of connections and those made by others within the system (boyd & Ellison, 2007). The nature of interactivity and capabilities varies from site to site. Beyond basic profiles, lists of friends or connections, self- and user-generated comments including private messaging, more sophisticated SNSs have photo-sharing or video-sharing capabilities. Others have built-in blogging and instant messaging technology (boyd & Ellison, 2007) that are up to the user to employ. While I will investigate levels of engagement in the SNS, the online videoconferencing meeting capability of the SNS will be the focus of this research. These online 'videoconferencing' meetings involve the use of live web cams that broadcast visuals of both the elected speaker and chairperson, while up to 150 plus members watch and listen, even instant message (IM) one another during the hour long meetings. It is important to note, however, that meeting attendees can only view the speaker and the chairperson while the other attendees remain as anonymous as their screen name and featured profile picture. In other words, when compared to face-to-face meetings, videoconferencing meetings in this context provide a rather limited amount of visual information, such as the non-verbal behavior and non-verbal cues of other meeting attendees, at any given moment for the duration of the meeting.

In sum, while presently the literature suggests that the Internet is a successful medium for those with health-related concerns seeking social support (Walther & Parks, 2002; Walther & Boyd, 2002), less is known about the quality, frequency, and immediacy of social support achieved in online videoconference meetings. Accordingly, the current work seeks to explore social support in online 12 step videoconferencing meetings from a health and computer-mediated communication (CMC) perspective by investigating perceptions of meeting effectiveness, small group and relational satisfaction, identification, support and network quality, anonymity, and access. This work extends the social support framework into a growing area of health communication research, self-help groups utilizing videoconferencing meetings and social networking sites. In addition, this research tested the SIDE model in a videoconferencing environment demonstrating that satisfaction, effectiveness, and quality of social support experienced within a 12 step group largely predicts members' identification. Taken together, the research and findings discussed here both open new avenues of inquiry for online social support and practical application in healthcare settings.

CHAPTER TWO

Review of Literature

The rationale of this study draws from two bodies of literature, organizational videoconferencing research and social support (traditional face-to-face and online). In addition, because of the contextual similarities of the study, a brief review of the emergent literature on telemedicine is provided. Thus, this chapter begins with a general overview of addiction and its prominence, historical and philosophical tenets of 12 step recovery programs and existing research. Next, organizational videoconferencing meeting research is reviewed. Following, a definition of social support is provided as well as the theoretical framework from which most social support research operates. Later, I discuss the many benefits associated with social support and the importance of both quality of support and network in social support groups.

Guided by the social identity model of deindividuation effects (SIDE) (Lea & Spears, 1992; Spears, et al., 1994; Postmes, et al., 1998; Reicher, et al., 1995), I discuss differences between computer-mediated communication and face-to-face interactions, specifically online and offline social support. In addition, I address both the advantages and disadvantages found in online social support literature. Lastly, telemedicine is reviewed to understand the potential benefits and limitations of videoconferencing meetings in this new context.

An Introduction to Addiction

Alcoholism was first recognized as a disease in the 1950s by the World Health Organization (Heather & Robertson, 1997). *Alcoholism*, by definition, is one of the most serious, noninfectious, preventable diseases in the United States and all other developed nations (Maltzman, 2000). Potter-Efron characterizes alcoholism as a chronic and progressive disease that is based on a preoccupation with alcohol and an impaired ability to control alcohol intake (2002). Potter-Efron also adds, and it is vitally important to note, that this disease can be fatal if the proper treatment is not sought and practiced on a daily basis (2002). The same fate is true for persons struggling with other forms of addiction, such as gambling, anorexia or prescription drugs. Ultimately alcohol and drug abuse dominates thinking, emotions, and actions and becomes the principal means through which a person can deal with work, people and life. However, addiction is a unique disease because the progression of the disease does in fact lie in the hands of the addict. This strange phenomenon provides hope to those diagnosed with an addiction.

Alcoholism, like other addictions, is an insidious disease and because of this, it is difficult to ascertain if a person is an alcoholic or just experiences problems from drinking. Notwithstanding, these problems do exist among people from all walks of life. Cargiulo reports that "in the year 2000, alcohol consumption was responsible for 85,000 deaths, or 3.5% of all deaths, in the Unites States, making alcohol consumption the third leading behavioral cause of death after tobacco use and poor diet and physical inactivity" (2007, p. S5). Alcohol also contributes to traffic-related injuries and deaths. Research shows that there were an estimated 17,000 traffic fatalities in alcohol related crashes in

2004, and approximately 250,000 injuries occurred where alcohol was reported present (Cargiulo, 2007). Alcoholism and substance abuse is becoming more prevalent among young adults creating irrevocable results in this age group. The American Medical Association (AMA) reports that approximately 11 million American youth drink alcohol underage and nearly half of them drink to excess (2007).

Alcoholism and drug abuse cause major social, economic and public health problems that are often irreversible. This fact reinforces the importance of understanding the best treatment options for persons directly, and indirectly, suffering from the disease. The optimal goal of treatment for alcoholism and other addictive behaviors is abstinence. Once abstinence is reached, the center of attention shifts to relapse prevention and long-term rehabilitation (Swift, 2007a; 2007b). The most successful long-term rehabilitation involves some type of intervention and or program, reviewed below, that uses both a combination of counseling and individual or group therapy to help an addict abstain from alcohol or his drug of choice (DOC).

Addiction Social Support Group(s): The 12 Step Program

Addiction, a particularly stigmatized health issue (for review see Valverde, 1998), is often treated by attending self-help groups such as Alcoholics Anonymous (AA) and related 12-step fellowships (e.g. Narcotics Anonymous (NA), Gamblers Anonymous (GA), Overeaters Anonymous (OA) and Alanon). A *self-help group* is defined as a supportive, educational, usually change oriented mutual aid group that addresses a single life problem or condition shared by all members (Kurtz, 1997). Self-help groups have become a permanent fixture in American culture and have proved to be a valuable health

and social resource for individuals (Katz & Maida, 1990). Research points to several positive outcomes of involvement in self-help groups. These have been categorized as (a) sharing information such as ideas, facts, and resources; (b) engaging in dialogue to reveal multiple perspectives; (c) discussing taboo subjects; (d) being "all in the same boat" with others; (e) experiencing mutual support; (f) engaging in problem-solving and rehearsing; (g) overcoming alienation and isolation; (h) engaging in catharsis; (i) taking on the role of helper; (j) developing inspiration and hope; (k) developing social networks; and (l) assisting more people less expensively (Ayers, 1989; Boreman, Brock, Hess, & Pasquale, 1982; Caplan, 1974; Fullmer & Majumder, 1991; Gottlieb, 1981; Liberman, 1976; Lipson, 1982). Today, online self-help groups are becoming just as common. As such it is warranted to extend this line of research to understand the positive and or negative outcomes occurring within these rapidly expanding computer-mediated spaces.

In the United States, Alcoholics Anonymous (AA), first established in Akron, Ohio in 1935, is the most commonly sought organization when seeking help for alcohol related problems or dependencies (Room & Greenfield, 1993). Twelve step programs such as AA, NA, and Alanon are now available worldwide and their estimated membership is over 2 million members with 114,000 groups in 150 countries (AA, 2012). As the name implies, anonymity is paramount to 12 step fellowships. In fact, AA literature proclaims, "anonymity is the spiritual foundation of all our Traditions, ever reminding us to place principles before personalities" (AA, 1981, 2001). Understanding this truth helps frame the current study and is imperative to understanding how the program works. Anonymity serves two different yet equally vital functions in 12 step

programs such as AA/NA/Alanon. At the personal level, anonymity provides protection for all members from external identification as alcoholics, a safeguard often of special importance to newcomers. At the level of press, radio, TV, films, video, and Internet, anonymity stresses the equality in the fellowship of all members by 'putting the brake on' those who might otherwise exploit their AA affiliation to achieve recognition, power, or personal gain. Anonymity has proved one of the greatest gifts that 12 step programs offer the suffering addict, and without it, many would never attend their first meeting (AA, 1981, 2001).

Regular attendance at 12 step meetings is considered critical to staying clean and sober (Emrick, Tonigan, Montgomery, & Little; 1993). Regular attendance at 12 step meetings exposes individuals to a great deal of social support via a sober, safe and supportive interpersonal network. Taking life one day at a time, one meeting at a time, in 12 step programs, has been proven essential in the recovery for those whose lives have been adversely affected by the disease of addiction. The move to adopt a clean and sober network and to no longer associate with individuals who drink or use drugs (Campbell & Kelley, 2006) is often one the most difficult decisions or processes a beginner must make. However, this result can be achieved by attending 12 step meetings regularly because meetings encourage people to shift away from their substance abusing networks and adopt a network consisting of clean and sober individuals (McCrady, 2004). As discussed, problems associated with alcohol, substances and or addictive behaviors, are not just limited to the health problems of the addict. These behaviors lead to familial, social, vocational, and legal problems, which contaminate society as a whole (Maltzman,

2000). Thanks to the recent advances in technology and online social support groups described herein however, addicts and their interpersonal network are now able to manage their recovery both in person, over the phone (see Campbell & Kelley, 2006; 2008) and on online, up to one day—or even one minute—at a time.

Whether online or face-to-face, the two fundamental concepts 12 step fellowships rely on to achieve and maintain a successful recovery program are spiritual development and social support (Campbell & Kelley, 2006). Individuals often practice spiritual development, and or experience a spiritual awakening, during their quest for sobriety. When addicts embrace a power greater than themselves and undergo life-altering transformations, positive outcomes such as abstinence often result (Green, Fullilove, & Fullilove, 1998). Galanter (2007) describes 12 step programs like AA/NA/Alanon as a:

> Spiritual recovery movement, that is, one that effects compliance with its behavioral norms by engaging recruits in a social system that promotes new and transcendent meaning in their lives. The mechanisms underlying the attribution of new meaning in AA are considered by recourse to the models of positive psychology and social network support; both models have been found to be associated with constructive health outcomes in a variety of contexts. (p. 265)

While the concept of spiritual development and spiritual support is beyond the scope of this study, it is important to have a basic understanding of its significance in successful 12 step programs. More important to the present study is the communicative concept of social support experienced in meetings. Because this study looked at meetings in the context of videoconferencing specifically, it is important to understand the foundational research on videoconferencing in organizations.

Organizational Videoconferencing Research

Meetings are a core communication activity for organizations (Tracy & Dimock, 2004) and communities of all sizes around the world (Barley & Kunda, 2001; Heckscher, 1994). *Meetings* are defined as "a gathering of three or more people who agree to assemble for a purpose ostensibly related to the functioning of an organization or group" (Schwartzman, 1989, p. 61). Meetings serve a number of purposes in organizations and they often involve processes such as sense making, control, power relations, structuration, and decision-making (Fulk & Collins-Jarvis, 2001). The terms *teleconference* and *videoconference* are used synonymously for meetings with two or more participants communicating in real time through the use of tele-mediated live pictures and sounds (Andreev, Salomon, & Pliskin, 2010). The present study will investigate organized *self-help group meetings*, as such the review that follows will discuss the features of videoconferencing meetings that are germane to this study's context.

It is important to understand the limitations associated with online videoconferencing meetings, as the technology is now becoming firmly entrenched within modern organizations (Denstadli, Julsrude, & Hjorthol, 2012). While videoconferencing meetings in organizational communication research have been criticized for lack of satisfaction and celebrated for their increased efficiency and cost savings ability, they have largely been studied in organizations where group decision-making, negotiating and task accomplishment has been the goal (Fulk & Collins-Jarvis, 2001). One of the most important and consistent limitations cited in organizational

videoconferencing meeting research is that there is less emotional display from participants in videoconferencing meetings. Not only is there a loss of social presence (Rice, 1993; Short, Williams & Christie, 1976) in online videoconferencing meetings, but also some participants even show increased negative emotional display (Fulk & Collins-Jarvis, 2001). For example, Dennis and Kinney (1998) found that videoconferencing meetings diminished the feelings of social contact and presence of the other parties in attendance. These findings have negative implications for self-help groups where emotional support –both verbal and non-verbal –as well as physical presence are vital components of meetings.

Further, past research cites that the lack of social presence, or depersonalization, in mediums such as videoconferencing can cause self-centeredness (Sproull & Kiesler, 1986) and antisocial behavior (Siegel, et al., 1983). Past research indicates that videoconferencing-based work among individuals with established relationships in organizations does not match the quality of face-to-face work. This research also concludes that trust is difficult to establish when using videoconferencing (Garrison, Anderson, & Archer, 2000; Olson & Olson, 2000), which in turn creates negative implications for those seeking social support from a close, personal network. Scheduling, financial and technical difficulties are also cited as concerns for organizational members when using videoconferencing (Suggs, Cissell, McIntyre, & Ward, 2002). Traveling to conference video sites wastes time; the technology itself is expensive and not always reliable. The drawbacks listed here raise concern for those seeking social support from videoconferencing meetings and the 'virtual' participants who attend them.

In spite of these potential challenges, thirty years of communication research in videoconferencing has established several basic principles of the positive nature of participation in organizational videoconferencing meetings (for a full review see Fulk & Collins-Jarvis, 2001). Research consistently finds that there is more equal participation in videoconferencing meetings and that participation is more 'polite' and 'orderly.' This, in turn, allows more participants – or members of self-help groups –who might otherwise be reluctant to speak up or out of turn in traditional meetings to participate in online meetings. Other positive outcomes of videoconferencing research include the absence of a dominating leader, and less developed hierarchy within a group. More recent studies also suggest participants develop meeting facilitation skills and, as a result, foster greater interaction between facilitators and presenters ultimately leading to more productive meetings and successful collaborations (Hara, Solomon, Kim, & Sonnenwald, 2003; Sonnenwald, Soloman, Hara, Bollinger, & Cox, 2002; Steiner, Tsudik, Waidner, 2000). These findings seem promising for online self-help group meetings as traditional meetings rely heavily on all members participating equally and respectfully, including evenly sharing the role of lead chairperson.

Overall, much of the research on videoconferencing meetings focuses on interactions between individuals and teams with the same organizational goals and concerns. Akin, yet distinct, members of self-help support groups often have the same or similar personal goals and concerns. This commonality provides rationale for drawing comparisons in videoconferencing and social support research, where I strive to understand how videoconferencing technology either inhibits or facilitates these types of

interactions. In addition, the growing acceptance and reliance of videoconferencing in organizations, as well as the introduction of video platforms online for social support, highlight the importance of this research study now. As such, we turn to the literature on social support, which is the foundation of all successful self-help groups.

Social Support Framework

Social support is a communicative behavior as fundamental to human interaction as the communication behaviors of informing, persuading or teaching (Albrecht & Goldsmith, 2003)**.** Recognizing that social support is not a single, unified construct and that there are several variations of the definition (Williams, Barclay, & Schmied, 2004), this study adopts Albrecht and Adelman's (1987) definition of *social support* as "the verbal and nonverbal communication between recipients and providers that helps manage uncertainty about the situation, the self, the other or the relationship that functions to enhance a perception of personal control in one's life experiences" (p. 19). Social support can provide a sense of reassurance, validation, acceptance, sharing of resources, assistance and information; as well as offer connection to a supportive network for those seeking health and emotional well-being (Albrecht & Goldsmith, 2003). Similarly, Moss (1973) describes how social support:

> Provides each person with a communication network that is a safe base. Here he can be accepted whether he succeeds or fails in other networks. Here he can retreat to take stock of himself and prepare to meet 'life.' Here he is accepted as a 'whole person,' and all his various qualities, roles, desires, and the like are of interest. He is not simply a role player whose private life is of no concern to others. (p. 236-237)

Nowhere is this definition more appropriate than 'in the rooms' of 12 step fellowships online (or offline), where members learn to admit and accept their disease as well as commit to 'live life on life's terms' among a safe and supportive network (AA/NA, 1981, 2001). Social support occurs in many contexts that are not just limited to the traditional dyad. For instance, social support occurs anywhere, anytime in face-to-face group settings, anonymously online through email, blog posts or 'threads' (Hwang, Farheen, Johnson, Thomas, Barnes, & Bernstam, 2007; Sarasohn-Kahn, 2008), or as this research demonstrates through online videoconferencing meetings.

An extensive body of research suggests the importance of social support and the received physical and psychological benefits for those directly and or indirectly suffering a serious illness or health complication (Albrecht & Adelman, 1987; Burleson, et al., 1994; Cohen, McGowan, Fooskas, & Rose, 1984; Crewe & Athelstan, 1985; Cutrona, Russell, & Rose, 1986; Dean & Ensel, 1982; Dickson-Markman & Shern, 1990, Goldsmith, 1992; Lin & Dean, 1984; Lin & Ensel, 1984; Query & James, 1989). For example, researchers have demonstrated that social support facilitates weight loss, weight maintenance (Elfhag & Rossner, 2005; Gallagher, Jakicic, Napolitano, & Markus, 2006; National Heart, Lung and Blood Institute, 1998; Verheijden, Bakx, van Weel, Koelen, & van Staveren, 2005; Wing & Jeffrey, 1999), reduced stress (Cohen & Willis, 1985; Dean & Lin, 1977), increased sense of self-esteem and personal strength (Metts & Manns, 1996), as well as learned coping strategies (Kohn, 1996). Moreover, researchers find that in cancer support groups specifically, social support is related to a greater sense of internal locus of control over the disease (Sullivan & Reardon, 1985), reduced both

depression and feelings of anxiety (Evans & Connis, 1995). Members of these support groups tend to report fewer symptoms and less overall stress than nonmembers ("Living with Cancer," 1997). Conversely, dramatic effects of social isolation on mortality are identified (Berkman & Syme, 1979; House, Landis, Umberson, 1988). Likewise, being ignored or ostracized from a supportive network is associated with negative psychological consequences such as depressed mood, anxiety, loneliness, helplessness, invisibility, and frustration (Gruter & Masters, 1986; Williams, 1997). From organizations to the health community, expanding online videoconferencing meetings to manage health concerns points to the growing need for researchers to understand if the same physical and psychological benefits are experienced in these new contexts.

The Buffering Model & Main Effects Model in Social Support

Researchers find a significant relationship between social support and perceived stress in which two models have emerged in the literature: the buffering model and the main effects model. The *buffering model* suggests that the perceived availability of social support protects individuals from the negative effects of stress, such as weakened immunity and depression over time (Dean & Lin, 1977; LaRocca, House, & French, 1980). Thus, when an individual is faced with a stressful health situation, the perceived social support acts as a buffer or shock absorber, so the individual experiences less negative impact. Likewise, when an addict feels stigmatized by those outside his 12 step fellowship for an inability to control his destructive behavior, the social support group may offer this as a topic of discussion in a meeting. Perhaps this discussion carries over when the group congregates outside the meeting in which the suffering addict then joins.

As a result, the addict feels less ostracized, anxious and stressed, ultimately feeling better about his situation.

The *main effects model* proposes there is a direct, rather than indirect or buffering relationship between enacted social support and physical and psychological outcomes (Aneshensel & Stone, 1982; Thoits, 1982). Equally as important, this model suggests that humor, companionship, empathy and other supportive communicative behaviors have a direct effect on individuals' moods, subsequently boosting psychological well-being (Wright, 1999). While these models are helpful in conceptualizing and theorizing about social support, it is not necessary to establish which model is superior according to Flint, Query, and Rabb (1997). What is more important is that social support is a fundamental and integral process of human behavior and maintenance of health. For this reason, the ways in which social support is categorized and researched in the health communication field are reviewed below.

Types of Social Support

Social support research has been active since the early 1970s and offers a number of support conceptualizations and taxonomies (Fisher, 2010). Researchers in communication often tend to identify four types of social support (a) *instrumental or tangible,* (b) *emotional,* (c) *esteem,* (d) and *informational* (Cutrona & Suhr, 1992; Goldsmith, 2004). This approach conceptualizes social support as enacted support, which refers to what people say and do for each other and how this reduces stress and enhances overall well-being (Goldsmith, 2004). Instrumental support refers to tangible types of help and coordination, which can exist in the form of monetary support, 'lifting a hand'

for a sick friend, or dropping a family member off at his treatment center or AA meeting, for example. In addition to offering assistance for tasks directly related to the problem, social support can also be offered through indirect tasks. Indirect tasks do not necessarily relate to the health issue. An example of indirect tangible support would be offering to take a sick friend to the movies, thereby reducing stress. Emotional support refers to types of assistance such as listening, validating, offering a 'shoulder to cry on,' or 'being there during a time of need.' This type of support is also expressed through sympathy, understanding/empathy, physical affection, confidentiality, and prayer.

Esteem support, also referred to as appraisal support, simply comes in the form of offering validation for the person's feelings thereby reassuring them that what they face is a legitimate problem that they are capable of managing. Essentially, esteem support attempts to build the person up and increase self-efficacy and self-worth, which are expressed through compliments and relief of blame. Lastly, informational support deals with the exchanging of advice, cold hard facts, general knowledge about medicine, treatment plans, risk factors, and 12 step meeting times or locations. The ensuing literature emphasizes the importance of social support and demonstrates the ways in which social support is received. One of the prominent themes in social support literature is the perceived quality of social support. Presumably, the quality of social support is important to consider when investigating perceptions of received social support in relation to positive health outcomes.

Social Support Quality

Research on traditional social support offers two well-established empirical

generalizations about social support quality. According to Ford, Babrow, and Stohl (1996, p. 189) as cited in Walther and Boyd (2002): "First, not all ostensibly supportive social interactions are experienced as supportive, and second, the supportee's perception of the quality or substance of social support is a better predictor of successful coping than the sheer number or quantity of support at one's disposal." The literature contends that social support achieves positive health outcomes (Albrecht & Adelman, 1987; Burleson, et al., 1994; Cohen, et al., 1984; Crewe & Athelstan, 1985; Cutrona, et al., 1986; Dean & Ensel, 1982; Dickson-Markman & Shern, 1990, Goldsmith, 1992; Lin & Dean, 1984; Lin & Ensel, 1984; Query & James, 1989) however, as illustrated by Ford et al. (1996), it is apparent that not all social support is perceived as equal or beneficial.

Often, social support is synonymous with the communicative act of giving advice. *Advice* can be described as prescriptions of what one should or should not do (Knapp, Stole & Reardon, 1981) or directive guidance (Goldsmith & Fitch, 1997). In the United States, advice is one of the most common ways that individuals respond to others' problems (Cowen, 1982; Cutrona & Suhr, 1994; Cutrona, Suhr, & MacFarlane, 1990; D'Augelli & Levy, 1978; Reisman & Shorr, 1980) and is exchanged quite frequently in self-help groups. For example, the communicative acts in weight management literature often come in the form of general social support, 'you can do it,' or specific advice, 'do not skip breakfast.' The perceived effectiveness of advice is mixed because there are multiple, often complex relational, identity and instrumental goals in any one exchange (Wilson, 2002). In addition to this goals perspective, there are several contextual variables such as situational, conversational and cultural constraints that influence the

outcome of an advice episode or interpersonal social support exchange. Advice may also be seen as an intrusion or criticism, or be seen as violating the relational expectation of friends always being supportive. Thus, it is clear that social support in the form of advice is a complex communication behavior. Perhaps the most difficult dilemma for health communication scholars is that the advice recipient has conflicting motivations for listening to advice and taking action (Goldsmith & Fitch, 1997). Accordingly, in recovery self-help groups abstinence advice becomes especially susceptible to appreciation and perceived quality due to the sensitive nature of the topic and the tension the advice can cause in relationships. As we have seen, with the variety of social support types and forms that are exchanged, the communicative act differs in quality depending upon the host of factors listed above. This leads me to investigate, and introduce, two important dependent variables guiding this research, perceived social support quality and effectiveness.

> ***RQ1****: How do 12 step members perceive support quality in online 12-step videoconferencing meetings as compared to traditional 12-step meetings?*
>
> ***RQ2****: How do 12 step members perceive online 12 step videoconferencing meetings as an effective tool for recovery-related social support as compared to traditional 12 step meetings?*

Emotional, Problem-Solving & Relational Support

Emotional support, problem-solving and relational support are three types of support that are particularly useful to those who feel that they are powerless over their situation (Wright, 2002). In fact, surrendering is the first and most important of the 12 steps in recovery fellowships, where members 'admit we are powerless over alcohol, that

our lives had become unmanageable' (AA, 1981; 2001). Emotional support, problem-solving and relational types of support are closely connected to the typology listed above. For example, problem-solving support falls under informational support as this type of support offers ideas, suggests action, appraises the situation, and involves teaching and learning about the problem(s) at hand. Relational support is largely connected to esteem or network support where presence from friends, and access to new companions provides great relief to individuals suffering from incongruities. Suggesting the vital importance of emotional support, a content analysis of 100 health-related communities found that emotional support was the most frequent type of support found (Preece & Ghozati, 2001). Similarly, Finn (1999) and Braithwaite et al. (1999) found that the majority of the discussions in online support groups for people with disabilities were socio-emotional based.

While emotional support is less about decisional issues and more about psychological well-being (Walther & Boyd, 2002), equally as important for the addict is perceived relational and problem-solving support. To illustrate, addicts must succumb to the realization that they did not (a) cause their disease, nor can they (b) control or (c) cure their disease, they must learn to adapt to it and solve problems within their control. Furthermore, many addicts are not only faced with the task of adopting (and maintaining) a clean and sober lifestyle but they are encouraged to adopt a clean and sober network as well. To this end, many difficult decisions are made as a newcomer in attempt to solve problems with the direct, or indirect, help of newly formed relationships. The same is true for a member with many years of sobriety, who depends on his strong network base. It is

reasonable to assume that the degree to which members perceive the social support they experience in meetings to help solve problems and form relationships will help shape recovery experience and health outcomes. Based on this rationale, I posit that emotional support, problem-solving support, and relational support are integral parts of the recovery process and perceptions of these types of support may have important implications for positive health outcomes identified in previous research. Thus, the research questions that follow explore the extent to which members perceive small group and relational satisfaction in their meeting experience. The existing research on social support in 12 step programs is then reviewed below.

> ***RQ3****: How do 12 step members perceive small group satisfaction in online 12 step videoconferencing meetings as compared to traditional 12 step meetings?*
>
> ***RQ4****: How do 12 step members perceive relational satisfaction in online 12 step videoconferencing meetings as compared to traditional 12 step meetings?*

Social Support in 12 Step Programs

Social support can be experienced in a variety of ways in 12 step programs and, in general, research has indicated that social support practices lead to successful recovery outcomes. For example, Kaskutas, Bond, and Humphrey's (2002) longitudinal study of 654 AA members investigated the percentage of sobriety at 90 days, one year, and three years in relation to members' exposure to no social support, social support, and AA-based social support. At the one-year follow up interval, findings revealed that members reporting no social support only had 33% sobriety; members with non-AA social support had 45% sobriety. Meanwhile, those with AA-based social support had a sobriety rate of

72%. In the three-year follow up period, the only significant statistical mediator of AA's effect on total abstinence was the number of AA-based contacts (Bond, Kaskutas, & Weisner, 2003). This research reinforces the fact that social support and social networks are key components of 12 step programs. Accordingly, the present study will measure both the members' perceived quality of social support and recovery network as well as review research related more specifically to supportive networks. The process in which members receive social support in 12 step programs is enumerated below.

Useful activities where such supportive communication exists in 12 step programs as well as in clinical practice include the following: (a) choosing a home group – which helps develop a strong clean and sober support system, introduces the addict to service by helping at meetings, e.g. making coffee or setting up chairs, and provides the basis for an effective contact list; (b) going early and staying after each meeting to talk to other members; (c) reciprocal disclosure, listening or sharing at meetings and recognizing that this is a way of helping others; the message of AA or NA is learning to be open and honest in sharing one's experience, strength and hope; and (d) acquiring a sponsor and working the 12 steps (Caldwell & Cutter, 1998*;* Humphreys, Kaskutas, & Weisner; 1998). As seen here, social support is a fundamental communication behavior in 12 step programs, and is by and large a reciprocal process (Albrecht & Goldsmith, 2003).

Guided by the 12 step approach where lifetime affiliation is encouraged (Beattie & Longabaugh, 1999) 12 step fellowships have been shown to compare favorably to other cognitive behavior therapies on a wide range of outcomes measures, including abstinence (Bond, et. al, 2003; Kaskutas et al., 2002*;* Ouimette, Finney, & Moos, 1997).

Researchers have found certain types of support are especially salient in these communities. Because certain aspects of addiction are uncontrollable, just as with many diseases, emotional and esteem support become vitally important for the addict to achieve and maintain sobriety (Roberts & Koob, 1997). Likewise, instrumental support, such as rides to work or treatment facilities, informational support, such as 12 step meeting times and locations, can be just as useful as emotional support (Alexander, Willie, & Hollingshead, 2002). Burleson and MacGeorge (2002) argue that when other forms of support are appropriate they are most effective when delivered in conjunction with emotional support.

However, empirical evidence of a linkage between alcohol treatment, social support, and outcomes is also mixed. For example, Rosenberg (1983) found that general social support from friends protected against relapse, although family support did not. Researchers Gordon and Zrull (1991) found that perceived support from family and co-workers (but not from friends) predicted drinking outcome. MacDonald (1987) found that the number of supportive relationships did in fact predict abstinence. Other research indicates that alcohol-specific support, or support directed to a person's alcohol use more consistently predicts treatment outcomes. For instance, Havassy, Hall, and Wasserman (1991) found that partner support for abstinence predicted less relapse, but general social support (emotional, instrumental, and negative) did not. As for meeting attendance, Montgomery, Miller and Tonigan (1995) found that individuals attending AA following inpatient treatment for alcohol dependence was not predictive of drinking outcomes. However, a degree to which patients both attended and became involved in AA did

predict more favorable outcomes. In sum, while a positive correlation between active participation in AA and better drinking outcomes has been established, as researchers Kaskutas et al. (2002) point out, the explanations underlying this relationship are not sufficiently explored. To this end, further study is needed to address components of social support in more depth, to establish how support from other 12 step members, friends, family, spouses, and coworkers might affect drinking and or substance abusing outcomes.

In brief, spiritual development, meetings, and a supportive network are vital components to working and maintaining a successful program in 12 step fellowships. Meetings are the principal means by which members experience social support from a supportive network and are now available online via videoconferencing technology. As a result, the recovery-based SNS presented here presents an opportunity to explore the relationship of attendance in AA and health outcomes further in new computer-mediated environments where social support is being received. The subsequent section reviews the existing, albeit limited, research in 12 step programs online.

Online Social Support in 12 Step Programs

A considerable amount of literature exists on the benefits of social support in recovery, but researchers have just begun to explore the availability of social support in recovery-based computer-mediated environments. While researchers Van Lear, Sheehan, Withers and Walker (2005) examined esteem and emotional support in Alcoholics Anonymous communities online, their focus was comparing AA support groups and non-AA support groups on self-presentation strategies within (a) asynchronous bulletin board

meetings, (b) synchronous informal AA chats and (c) formal synchronous AA discussions. Their findings suggest that AA groups differed from other supportive groups in their interaction patterns, such that AA support groups had higher proportions of private and personal self-presentations, agreements, and reciprocal personal acceptance between members. Moreover, AA support groups had fewer negative comments as compared to non-AA support groups, and as a result evoked fewer negative responses.

In addition to investigations of asynchronous and synchronous chat online in 12 step programs, exploratory communication research has been conducted on the use of mobile phone technology in instrumental and expressive interactions and recovery efforts in AA. This research provides preliminary evidence that mobile communication has become a valuable resource for social support and social connection in AA. The information communication technology (ICT) has become a key carrier of the message of AA and is an important vehicle for making AA work better (Campbell & Kelley, 2006; 2008). Thus, this research sets a promising outlook for other ICTs and computer-mediated environments, such as the SNS in the present study, to be additional or supplemental resources in AA and similar self-help groups.

However as abovementioned, less is known about members' perception of social support in advanced forms of computer-mediated technology. Online social support has evolved past asynchronous chat rooms, discussion boards, and simple phone calls to more sophisticated interactive social media platforms and synchronous videoconference meetings offering simultaneous instant messaging. In this case, it allows 12 step meeting

members to go beyond church basements and community centers into a virtual world of support available 24 hours a day, seven days a week. As such, this study presents an opportunity to shed further light in this area of research from the perspective of computer-mediated communication theory and a social support framework. Understanding how videoconferencing technology is utilized and perceived in this online recovery community could help researchers better predict recovery outcomes and, in turn, develop optimal recovery plans. Given the complexity of the interaction within the videoconferencing environment in this context, I have advanced several exploratory research questions to better understand how these meetings play a role in 12 step fellowships and what social support context, online or offline, best influences health outcomes. Before turning to the remainder of research questions and hypotheses however, it is important to understand one theoretical model of CMC, the social identity model of deindividuation effects (SIDE) (Lea & Spears, 1992; Spears, et al., 1994; Postmes, et al., 1998; Reicher, et al., 1995).

Computer-mediated Communication versus Face-to-Face Interactions

Traditionally, scholars have lauded face-to-face communication for its ability to convey interpersonal character, form relationships and offer social support. Today however, computer-mediated communication (CMC) systems have become integral to the initiation, development, and maintenance of interpersonal relationships as well (Walther, 2011). Early theorizing once described CMC as an impersonal 'lean medium' in which CMC channels lacked the rich nonverbal cues normally associated with relational communication (Buck & VanLear, 2002; for review, see Garton & Wellman,

1995). For example, media richness theory (MRT) (Daft & Lengel, 1984) classifies communication channels according to the complexity of the messages and assumes individuals make choices based on desired outcomes. According to this theory, face-to-face communication provides a "rich" mix of verbal and nonverbal behaviors (cues) that convey highly nuanced emotions and possible different meanings. Conversely, the 'cues filtered out' aspect of CMC calls for a "lean" medium, sufficient for transacting daily business tasks but insufficient for social and personal relationships (Short, et al., 1976; Siegel, Dubrovsky, Kiesler, Siegel & McGuire, 1986; Sproull & Kiesler, 1986). A "lean" channel such as e-mail or an online social support discussion board is essentially stripped down and thus lacks four richness features: the ability to transmit multiple signals; access to immediate feedback from the receiver; a chance to tailor the message to the real-time situation; and the ability to incorporate conversational language such as slang and ambiguous references (Daft & Lengel, 1984).

While communication scholarship and CMC theories on interpersonal relationships within computer-mediated environments focus on challenges associated with lack of nonverbal and contextual cues (Wright, 1999), a number of studies reveal that satisfying relationships will progress on the Internet if individuals invest enough time (Matheson, 1991; McCormick & McCormick, 1992; Parks & Floyd, 1996; Rice & Love, 1987; Walther, 1996; Walther & Burgoon, 1992). One theory connected to this idea is the social identity model of deindividuation effects. The social identity model of deindividuation effects (SIDE) (Lea & Spears, 1992; Spears, et al., 1994; Postmes, et al., 1998; Reicher, et al., 1995) is useful when trying to understand the benefits and limits of social support

in a new online environment where relationships are formed via large social networks. In brief, SIDE proposes that a salient group identity combined with anonymity (or deindividuation) will predict attraction or liking, produce normative behavior, and create a common social identity among members. *Deindividuation* is defined as a state in which members feel submerged in, or strongly affiliated to a group, and who do not stand out individually (see Postmes, et al., 1998 for a review). SIDE explains intergroup and intragroup behavior in anonymous CMC and has received extensive support in experimental studies (Lea & Spears, 1992; 1995). Visual anonymity fosters social identities and group categories over individual identities and is therefore a central component of online health support groups. Hence, SIDE provides rationale for why online social support groups such as AA are beneficial and successful for health and recovery outcomes. Particularly, the anonymous nature within this community combined with the existing group identity influences members to feel a stronger social identity and connection to the group. This in turn produces positive relationships among members while at the same time facilitating normative social support communication. More specifically, online videoconferencing meetings, which produce limited visual information as compared to face-to-face meetings, may in fact prove to offer more consistent and quality social support, void of distractions that often focus on individual differences.

Seminal work in the area of health communication research suggests that online social support produces satisfying results and offers unique advantages compared to traditional social support, despite lacking non-verbal and contextual cues (Sullivan, 1997;

Weinberg, et al., 1995; Winzleberg, 1997). Yet researchers have only begun to scratch the surface of social support and health outcomes in these new computer-mediated contexts (Alexander, et al., 1999; Braithwaite, et al., 1999; Preece & Ghozati, 2001; Sullivan, 1997; Wright, 1999, 2000a, 2000b). The remainder of chapter two discusses the emerging phenomenon of online social support, and the potential benefits and limitations of online videoconferencing meetings offering social support. Guided by the SIDE model, we begin with online social support advantages.

Online Social Support Advantages

Social support is exchanged via computer-mediated communication in almost infinite networks among strangers who do not communicate face-to-face. To date, these computer-mediated spaces systematically alter the communication process and the sources of support upon which participants rely (Walther & Boyd, 2002). But they do offer a number of unique advantages to those seeking social support. There are similarities of social support in both traditional and online social support such as: (a) common experience, all members of the fellowship face the same or similar issue; (b) mutual help and support, offering social support via reassurance that group members meet regularly, hold one another accountable, and provide mutual aid; (c) the helper principle, providing support to others provides the most benefit to the person giving it; (d) differential association, which emphasizes a healthy self-concept while encouraging members to depart from previous unhealthy self-concepts; (e) collective belief, where members draw validation from one another, and (f) importance of information, where members exchange factual and mutual understanding of the problem (Robinson,1988).

However, there are a number of characteristics that make traditional and online support distinctive (Hiltz & Turoff, 1978; Rice & Gattiker, 2001).

Generally, these characteristics include: how messages are composed in computer-mediated communication and how people might express themselves differently (Bordia, 1997; Hancock & Dunham, 2001; Kiesler, Siegel, & McGuire, 1984); how relationships are formed, maintained or possibly changed (Lea & Spears, 1995; McKenna, Green, & Gleason, 2002; Parks & Floyd, 1996; Walther, 1996); and how social networks are built and perhaps even broken (Fulk, Flanagin, Kalman, Monge, & Ryan, 1996; Postmes, et al., 1998; Spears, Lea, & Postmes, 2001). Research suggests that these features all may have an effect on the way people seek, receive and or deliver information and social support (Tanis, 2008). Specifically, online social support affords individuals increased anonymity, reduced stigma, increased access, and an extended network. In the subsequent sections, I outline the advantages followed by the disadvantages found in online social support group literature.

Anonymity

Studies of behavior in CMC have focused on the medium's anonymity and how communication via computers is somehow changed because of anonymity (Douglas & McGarty, 2001). This phenomenon has received extensive attention in a variety of research settings from work-related behavior (Finholt & Sproull, 1990; Sherblom, 1988; Siegel, et al., 1986; Sproull & Kiesler, 1986), to both romantic and friendship relationship formations online (Lea & Spears, 1995; Parks & Floyd, 1996; van Gelder, 1985; Wilkins, 1991), to studies of impolite or hostile communication type behaviors (Chester, 1996;

Kiesler, et al., 1984; Lea, O'Shea, Fung, & Spears, 1992; Siegel et al., 1996; Sproull & Kiesler, 1986, 1991). Historically, past research supports the idea that relative to face-to-face communication, the anonymous nature of CMC contributes to negative interactions between individuals in a variety of contexts (Douglas & McGarty, 2001). However, recent research and theoretical models such as SIDE challenge the idea that anonymity is damaging and unconstructive. In fact, this line of research suggests that anonymity is quite the opposite, that it can encourage a sense of belonging and identification to a group, provide safe haven to disclose risky information, and reduce stigma.

Anonymity has been hailed as one of the key benefits of computer-based support systems (Dennis, Heminger, Nunamaker, and Vogel, 1990; Nunamaker, Dennis, Valacich, Vogel, & George, 1993; Wilson & Jessup, 1995). According to SIDE, anonymity has the power to produce positive impressions and experiences for group members experiencing a common identity. The resulting anonymous environment can have many effects on individuals and groups (Tanis, 2008). First, SIDE states anonymity in the crowd results in the loss of personal identity. This effect is one explanation for why participants feel safe to disclose personal details when seeking social support online, inducing others to reciprocate with similar, often intimate, stigmatized or traumatic experiences of their own (Parks & Floyd, 1996; Swickert, Hittner, Harris, & Herring, 2002; Tanis, 2008; Wallace, 1999; Walther & Boyd, 2002; Wright, 2000). Users can truly express what they think and feel under the protective cloak of anonymity (McKenna & Bargh, 2004), seemingly free of judgment and criticism. Second, but related, the option to remain anonymous is particularly helpful for those who feel ashamed or face

conditions that are caused by illegal or irresponsible behavior (Tanis, 2008). The possibility to remain unidentifiable in these situations allows and encourages users to seek the help they need by removing the feeling of discomfort and exposure. Therefore, this research asks:

> ***RQ5****: How do 12 step members identify with their fellowship in online 12 step videoconferencing meetings as compared to traditional 12 step meetings?*

The ability to remain anonymous is especially important in 12 step fellowships where anonymity is paramount and a founding tradition. It is logical to assume, for purposes of this study, anonymity, therefore, should heavily influence the online videoconferencing experience for this community. Because SIDE predicts attraction or liking and normative behavior, as well as strengthens a social identity among members in anonymous groups online, one might anticipate a significant link between identification and other positive perceptions in 12 step groups online such as effectiveness, satisfaction, and support quality. Therefore the following hypotheses are posited:

> ***H1:*** *12 step members who perceive their experience as more effective, satisfying and perceive more support quality will more strongly identify with their support group fellowship.*

> ***H2:*** *12 step members attending online 12 step videoconferencing meetings will feel more anonymous than 12 step members traditional face-to-face meetings.*

Reduced stigma. Closely connected to the idea of anonymity, stigma is often attached to certain illnesses and conditions and creates social implications for the person (or persons) directly or indirectly suffering from them (Adelman & Frey, 1997; Cline & Boyd, 1993; Mickelson, 1997; Wolcott, Namir, Fawzy, Gottlieb, & Mitsuyasu, 1986;

Wright, 2000b). *Stigma* refers to any sense of shame, disgrace, or taboo associated with a particular illness/condition, usually stemming from fears and prejudices surrounding cultural conceptions of a health issue. Wright (2000) found that the most frequently mentioned benefit of computer-mediated support groups for people dealing with health related issues (substance abuse, cancer, and mental illness) was that group members perceived that there was less stigma attached to their illness when interacting with their online support group compared to face-to-face interactions. To be able to search for information or to interact with others from the safe location in front of their computer, without having to reveal their identity, provides the freedom to ask questions and express themselves without shame or feelings that their privacy is violated (Braithwaite et al., 1999; Wallace, 1999). This in turn, allows persons suffering from stigmatizing disorders to discuss potentially embarrassing topics or taboo subjects, increasing the possibility of self-disclosures and encouraging honesty and intimacy (Ferguson, 1997; Galinsky, Schopler, & Abell, 1997; Klemm & Nolan, 1998). Similarly, researchers Wright and Bell (2003) found that members reported feeling more comfortable talking about their issues online, which helped them to establish more supportive relationships without the fear of judgment or stigma. Reduced stigma is another benefit that can be explained by SIDE, as it is largely due to the anonymity of online communication that gives people an opportunity to talk about their problems with others dealing with the same issues, without all the complications of face-to-face relationships (Wallace, 1999).

The reduced stigma and anonymity characteristic of online support groups is especially salient in the community under investigation in the current research. As

Valverde (1998) argues, historically alcoholism has been attributed to a 'weakness of the will,' and that many alcoholics, or addicts, are deemed as morally weak. Despite alcoholism being recognized as a disease by E. M. Jellinke in the 1940s, and 10 years later by the American Medical Association (AMA), alcoholics are still stigmatized for their dependence on substances. According to Valverde (1998), females are often stigmatized to a greater degree. As mentioned, most newcomers find it hard to attend their first meeting. Their admission of their alcoholism, or drug abuse, is often so painful that it is possible only in a protected environment free of stigma. Combined with anonymity and deindividuation, reduced stigma is essential for a supportive atmosphere of trust and openness in 12 step programs. Once again, stigma is a particularly sensitive topic in the current context and the safeguard that online social support provides this community is especially advantageous.

Text-Based

In addition to anonymity, the most obvious difference between face-to-face and traditional online social support interactions is that online interactions are primarily text-based and asynchronous. In other words, online social support groups are typically void of visuals cues, inflection, spatial movement, and facial gestures. While some view this as a limitation, research suggests several advantages to the text-based nature of online social support groups. First, the act of writing about emotional issues in itself may have positive outcomes on health (Miller & Gergen, 1998; Pennebaker, 1997), and correspondingly, the act of writing or announcing, a commitment publically increases the chances of attitude and behavioral change (Cialdini, 2009). For this population, this

research is significant as individuals with addiction largely depend on attitude and behavioral changes to become clean and sober.

Second, because these interactions are text-based, individuals are instead valued for their contributions to discussions rather than being judged, even stereotyped, on their physical appearances (sex, age, ethnicity, obesity or disability) (Erwin, Turk, Heimberg, Fresco & Hantula, 2004; Wallace, 1999; Weinberg, et al., 1995), which is also in line with the SIDE model. This text-based feature is especially important for 12 step members, as their primary purpose is to stay clean and sober and help others achieve sobriety by providing comfort, hope and friendship, strictly void of gossip, criticism and judgment (AA, 1981; 2001). Third, a more practical and heavily cited advantage of text-based online social support, is the unlimited amount of time an individual has to carefully manage their self-presentations and craft their questions, advice, or responses. This fact eliminates the potential for interruption, allows for greater cognitive resources to articulate, edit, and send a message which can be especially beneficial to those suffering from stigmatized, highly emotional health issues (Braithwaite, et al., 1999; Walther, 1996; Weinberg, et al., 1995). In turn, the time delay experienced in text-based interactions in CMC may result in better or more thoughtful advice from the sender. The reciprocal text-based nature in online social support leads to the receiver 'idealizing' the sender, more strategic self-presentation strategies, and magnified personal communication disclosures, which may make CMC especially conducive to emotional support (Turner, Grube, & Meyers, 2001; Walther, 1996).

However, as technology platforms become more interactive, some forums

facilitate synchronous real-time interaction, referred to as chatting. Some forums allow people the opportunity to include visual information such as a profile picture (Tanis, 2008). This visual identifiability has been found to override the effects of SIDE (Lea & Spears, 1992), as visual information challenges the idea of deindividuation and leads members to stray from the group identity. This visual information observed in video channels via videoconferencing technologies may challenge the efficacy of online 12 step videoconferencing meetings. Contrary to SIDE, however, the visual information provided in an online meeting might actually work as an advantage as it does in traditional meetings. Taking into account online social support advantages, these meetings may not only emulate the traditional meeting format by allowing others to see one another, but exceed the traditional meeting format as well. For example, historically, traditional meetings have exposed 12 step members to a wide array of social support as well as simultaneously extend their personal network. In comparison, online videoconferencing meetings have the potential to extend a member's network even further because of the unlimited number of strong and weak ties the Internet provides. This in turn, will expose members to a wider array of social support and information. As such, another online social support advantage, the extended network, is discussed below.

An Extended Network

The phenomenon of a supportive network has important implications for individuals facing health issues and highlights the need for not only a supportive network, but also a healthy and happy one. Researchers in psychology, sociology, and health communication continually confirm that our connections and networks have a major

influence on our behaviors, cognitions, and attitudes (Christakis & Fowler, 2009) and this is especially true for our health (House, et al., 1988). For this reason, a key factor in determining our health is found in the health of others (Christakis & Fowler, 2009). For example, there is empirical evidence to suggest that emotion is contagious among social networks. As defined by Hatfield and colleagues (1993), *emotional contagion* is the tendency to automatically mimic and synchronize expressions, vocalizations, postures and movement with those of another person and, consequently, to converge emotionally. For instance, having happy, healthy friends is an effective predictor of overall happiness and each happy friend a person has increases the probability of being happy by nine percent (Christakis & Fowler, 2008). This phenomenon is one explanation for why social support is so beneficial and important in interpersonal relationships. It is obvious that our networks play an exceedingly integral role in health, communication, and relationships. This is especially true with the advent of online networks.

More than ever, we carry out our lives in some form of mediated communication through social networks (Campbell & Kelley, 2008) thus the impetus for this research at this point in time. While an extensive amount of literature exists on the role of networks in providing social support in varying organizational contexts, such as families, communities, fellowships and neighborhoods (for reviews, see O'Reilly, 1988; Walker, Wasserman, & Wellman, 1994), this research can be extended further into varying computer-mediated contexts. Online social support provides people with access to an unlimited network of people who face similar situations that are often 'experiential experts' who might otherwise not be available due to geographical or time constraints

(Tanis, 2008). Braithwaite et al. (1999) surmises that the connectivity of extended networks online potentially increases the number of people who "hear" a request for support, thus multiplying opportunities for a response. For instance, people can search for information, engage in social interaction, or seek support from others globally without ever leaving their home. This flexibility is especially significant for those who have disabilities or other conditions that prevent them from physically, or verbally, extending their network (Braithwaite, et al., 1999). The idea of an extended network is especially important for 12 step programs as recovery-related communication continues to move online. Thus another reason for why this research study is timely. As explained below, members are expected to extend their social networks and in addition help others work their programs of sobriety.

Supportive Networks in 12 Step Programs

The importance of an extended social network in 12 step fellowships is paramount. In order for the recovery 12 step program treatment to be successful, open, honest and frequent supportive communication must exist between an addict and their social network. When an individual walks through the doors of AA/NA (either virtually or physically) and admits that they are in fact "powerless over a substance and their life has become unmanageable," they are often faced with abrupt life changing decisions and life altering behaviors (Campbell & Kelley, 2008; Green, et al., 1997). These life changing attitudes and behaviors are facilitated by communicating with, listening to, and learning from a supportive network in group meetings.

In addition to attending meetings, 12 step fellowships strongly encourage

individuals to further extend their supportive network by procuring a sponsor within the first year (Campbell & Kelley, 2006). They are to communicate with their sponsor on a regular basis, and practice the 12 steps to incorporate the 12 traditions into their daily lives. In doing so, the addict increases his chances for sobriety by surrounding himself with a positive, healthy supportive network. Conversely, there are benefits derived from the altruistic experience of giving support through sponsoring others in the AA network (Crape, Latkin, Laris, & Knowlton, 2002). Considering the mutual help approach of AA and its emphasis on network ties, it is likely that members' perceptions of recovery network quality helps shape members' experiences in recovery both online and offline. Thus, to determine if online 12 step videoconferencing is a valuable resource for recovery, recovery network quality needs to be taken into account. In sum, research indicates that the social support established in social networks impacts a person's health and recovery positively. This provides reason for questioning its perceived value. Hence,

> ***RQ6****: How do 12 step members perceive their recovery network quality in online 12-step videoconferencing meetings as compared to traditional 12-step meetings?*

Access

In addition to reduced stigma and an extended network, online social support is often celebrated for its ease and ability to provide support at anytime (Braithwaite, et al., 1999; Egdorf & Rahoi, 1994; Rheingold, 1993). The nature of the medium allows users to overcome temporal and geographic barriers usually encountered in face-to-face communication (Walther & Boyd, 2002). According to Galagher, Sproull and Kiesler (1998), online social support groups function the same way as face-to-face support

groups, but with added benefits such as greater access, anonymity and confidentiality:

> Confidentiality regarding the FtF group's proceedings may be expected, but one's physical presence and the possibility of encountering others in one's community create a risk of unwanted public exposure. Furthermore, these groups often exert social pressure on members to participate actively and to disclose their thoughts and feelings. Small size, local geography, and social pressure make these groups less private, less anonymous, and more conformist than are electronic social support groups (p. 497)

The ability to receive support immediately is important and comforting to those who are in the midst of a health crisis. Not surprisingly then, immediacy has been found to be an important variable in face-to-face relational communication (Burgoon, Buller, & Woodall, 1996; Burgoon & Hale, 1987), and is no less important in online relational communication. Campbell and Wright (2002) found a positive relationship between perceptions of immediacy and perceptions of emotional support. The Comprehensive Health Enhancement Support System (CHESS), an interactive community focusing on women with breast cancer and people with HIV/AIDS, found that many participants extensively used the 24-hour availability function with 40% of use occurring during evening and late night hours (Boberg, Gustafason, Hawkings, Chan, Bricker, Pingree, & Berhe, 1995; Gustafson, Wise, McTavish, Taylor, Wolberg, Stewart, Smalley, & Bosworth, 1993).

This research suggests that many people utilize online social support after hours when others might not otherwise be available face-to-face. For example, in dyadic, off-line social support, the support provider such as a doctor or drug counselor, may not be available at a moment's notice (Letham & Duck, 1990). This poses a threat to those who

are in need of immediate help. In the present context, a sponsor may not be immediately available when an addict is experiencing a desire to use or who might be in danger of harming himself. In this case, online social support experienced in videoconferencing meetings and SNS that provide functions such as private and instant messaging, discussion boards and forums, information and advice, or frequently asked questions (FAQs), has the potential to alleviate the feeling of helplessness that can strike during an addict's recovery. Thus, the remainder of my hypotheses is proposed:

> ***H3****: 12 step members will perceive online 12 step videoconferencing meetings as more accessible than traditional face-to-face meetings*
>
> ***H4:*** *12 step members who are more engaged online will perceive their experience as more effective, satisfying and supportive than those12 step members that are not as engaged online*

So far, this study emphasizes the benefits of social support and online support groups. The framework of social support and the social model of deindivduation effects (SIDE) guide a number of my research questions and hypotheses. To gain deeper insights into the contextualization of online support groups, an understanding of its limitations is warranted.

Online Social Support Disadvantages

On the contrary to the advantages listed above, there are several disadvantages that could occur in this online setting that warrant discussion when evaluating a new technology where supportive communication exist. Just as early research on face-to-face support was characterized by optimism and then tempered by studies that documented negative effects of support, current research on online social support in computer-

mediated spaces is beginning to discover negative interpersonal interactions as well (Alexander, et al., 1999; Kraut, Patterson, Lundmark, Kiesler, Mukopadhyaya, & Scherlis, 1998). Wright (2000) describes disadvantages in online social support in the following ways: the inability to make physical contact with others; the lack of non-verbal communication; flaming/off topic remarks, defined as hostile expression of strong emotions and feelings (Lea, et al., 1992); greater deception and slower feedback between sending and receiving messages. The lack of non-verbal communication cues and inability to make physical contact with others in CMC can be viewed as a major limitation, as research claims that 90 percent or more of emotional messages are non-verbal (Goleman, 1995).

In addition, although computer-mediated communication is a cost-effective way to send messages to many people simultaneously, online social support groups may suffer from inaccurate information, reduced credibility from users and decreased involvement in participation. Other concerns found in Kraut et al.'s longitudinal study were the effects of the Internet on social involvement and psychological well-being. Greater use of the Internet was associated with both declines in participants' family communication and the size of their social circle, as well as increases in depression and loneliness (1998). As Wright (1997) explains, AA members often report feelings of extreme isolation and a lack of openness and honesty with others prior to joining AA. As such, this trend is especially concerning for this community whose recovery success mostly depends on perpetual social support and contact with others.

Similarly, Galinski et al. (1997) found that some online support members were

unsuccessful in using the computer technology, and in addition had concerns of privacy, general distaste for missing nonverbal cues, and hurtful or inappropriate remarks from other members. One explanation for this can be attributed to the dark side of SIDE, as this model predicts disliking, anti-normative behavior and flaming when people have anonymous CMC interactions and have dissimilar identities. Lastly, although social support groups online are a cost-effective way to send messages to an extended network at anytime, individuals who want to join must have access to the Internet. As such, access to a computer and technology may be a barrier of soliciting and receiving social support for some demographic and socioeconomic groups (Braithwaite, et al., 1999; Madara, 1997; White & Dorman, 2001). Therefore, the evidence presented here has negative implications for online social support and online videoconferencing meetings and emphasizes the need for more research.

The preceding literature review provides background on online social support, as well as sheds light for researchers to transfer these potential advantages and disadvantages to online 12 step videoconferencing meetings. However, the majority of this research focuses on text-based computer-mediated communication interactions. With the advent of self-help groups not only moving online, but moving beyond discussion boards to more interactive forms of communication such as videoconferencing, additional research is needed to extend current understanding of advantages and disadvantages online. As seen, communication research on videoconferencing most relevant to the current study can be found in the intersection of organizational meetings and telemedicine. Existing literature on organization meetings explores videoconferencing

mostly in the business setting in either group decision-making, management and negotiation, and or task accomplishment (Fulk & Collins-Jarvis, 2001). Telemedicine research, however, focuses on the effects of videoconferencing on provider-patient interactions in many health contexts as well as non-clinical purposes such as education or training (Bashshur, Sanders, & Shannon, 1997; Daley, Spalla, & Arndt, 2008; Gutske, Balch, West & Rogers 2000; Wooten, Yellowlees, & McLaren, 2003). Taking cues from the benefits and limitations of videoconferencing described in these fields, the following literature on telemedicine provides background for the remainder of the study.

Telemedicine & Teleconsultations

The introduction of telemedicine technology in the past ten years has transformed the healthcare context and produced a promising area of health communication scholarship (Turner, 2003). It has been argued that telemedicine may have the greatest impact on the future of healthcare than any other modality (Debakey, 1995). *Telemedicine* is defined as the use of telecommunications technologies to facilitate the delivery of health care at a distance for the direct benefit of patients (Bashshur, 1997*;* Grigsby, Sandberg, Kaehny, Kramer, Schlenker, Shaughnessy, 1994; Peredinia & Allen, 1995). Telemedicine has created an innovative and dynamic environment for communication researchers to explore questions of provider-patient interaction. While it has been proven to be an effective mode of transmitting information (Turner, 2003), less is known about the quality of support, level of effectiveness and satisfaction found in telemedicine technologies in general, and for self-help groups specifically. This study attempts to fill this gap and largely expand the scope of telemedicine research by

introducing a tele-environment in which research questions explore the patient-to-patient interaction in the form of self-help group meetings online.

The applications of videoconferencing are varied in the healthcare context. Videoconferencing can be employed in assessments, therapeutic care, follow-up care, outpatient visits, medication management, psychotherapy and consultation. To date, most research on telemedicine focuses on the doctor-patient relationship in the context of consultations, or teleconsultations, where the examining physician is not co-present with the patient (Turner, 2003). The most common type of teleconsultation occurs in the mental health setting where the interaction is less technology dependent. Instruments such as stethoscopes or medical equipment such as x-ray machines are not needed, and according to Grigsby and Allen (1997) these consultations are accomplished effectively using low bandwidths. In this particular literature, researchers focus on a comparison of a face-to-face context with a mediated context, as well as the ability or inability of the video image to replace a face-to-face interaction. This type of research is particularly useful when considering the benefits and limitations of videoconferencing in this context as individuals seeking mental health services are often similarly seeking attitude or behavioral changes just as members are in recovery.

Reviews of telemedicine via videoconferencing technology across a variety of specialties reveal positive clinical outcomes (see reviews of telemedicine use in dermatology, primary care, psychiatry, and oncology in Bashshur, et al., 1997). For example, Gutske and colleagues (2000) found high satisfaction levels compared to traditional doctor and patient satisfaction studies. Explanations for this include less

waiting and travel time and ease in arranging appointments. Ease of access and physician's communication style are also cited as important contributors to patient satisfaction with telemedicine encounters (Allen & Hayes, 1994).

Videoconferencing in Breast Cancer Support Groups

The existing research on videoconferencing in breast cancer support groups points to positive social support experiences and health outcomes as well. But while this research demonstrates the potential of the technology, a definitive conclusion is premature, as videoconferencing research in self-help groups remains sparse. Yet positive outcomes, such as decrease in depressive symptoms and post-traumatic stress disorder (PTSD), were found in a pilot study of videoconferencing in breast cancer support groups for women living in rural communities. In addition to these quantitative findings consistent with online social support literature, the women interviewed endorsed the videoconferencing experience as feasible and valuable. For instance, the technology allowed them to learn and share information they would not otherwise have received, made them feel less alone, as well as boosted their self-efficacy. Moreover, in line with the SIDE model, several women shared that 'distance' and 'relative anonymity' helped them open up to others in the group to make emotional connections and friendships. These women believed that these emotional connections and friendships both reduced their distress and gave them strength (Collie, Kreshka, Ferrier, Parsons, Graddy, Avram, Mannell, Chen, Perkins, Koopman, 2007). This research reinforces the importance of online informational and emotional support for individuals facing health issues, especially in rural areas. As a result of this pilot study, it is reasonable to assume that

videoconferencing in 12 step programs between addicts could produce similar positive results.

Telemedicine Disadvantages

The phenomenon of telemedicine continues to inspire research as scholars attempt to discern why it is not a universally positive experience. For example, concerns of patients not playing an active role in telemedicine consultations have been found to affect quality of care, the patient-provider relationship and future use (Street, Wheeler, & Mccaughan, 2000). This raises concern in this new context where participation in online self-help group meetings could be largely unequal. As we have seen, participation and involvement in 12 step programs is a key variable in the success of recovery and is worth exploring if this technology impedes this important process. Another disadvantage often found in this body of literature is that technical issues, often experienced with lower bandwidths, can be distracting and disturbing for both parties (Wootton, et al., 2003). For example, the video may drop out intermittently or audio lags may occur, so that at times what is said and when it is heard are desynchronized. This fact heightens concerns for practitioners and patients alike because for example, misinformation about prescription dosages could be harmful and even deadly. Concerns of confidentiality, data protection and informed consent have also been raised (De Weger, Macinnes, Enser, Francis, & Jones, 2012). All of these characteristics negatively affect the quality of videoconferencing, thereby affecting the quality of the communication interaction and subsequent health outcomes.

On the whole, there is a clear and consistent pattern that suggests telemedicine research produces promising outcomes in the healthcare setting. However, much of this work has focused on the dyadic relationship. Therefore, expanding this research beyond dyadic relationships to self-help support groups becomes an important area for scholars to investigate further. This is especially the case as the Internet continues to offer new technologies where infinite groups and relationships are formed online to manage their health collectively. Taken together, research on videoconferencing meetings in organizations, online social support and telemedicine suggest that videoconferencing technology has the potential to provide satisfaction and perceptions of effectiveness for individuals in group health settings, like self-help groups and 12 step fellowships. In conclusion, the literature herein suggests the technology and its features such as anonymity and 24 hour access promote more even and polite participation, less hierarchy and formal leadership, less isolation, increased efficacy and reduced stress, formation of relationships and exchange of valuable information and emotional support. But at this point, research associated with large-scale videoconferencing meetings in online social support groups is sparse and inconclusive.

A Review of Theory

Both SIDE and online social support suggest that anonymity can positively affect online text-based group interactions. Thereby, it is logical to assume that this videoconferencing technology will be beneficial for facilitating social support in 12 step fellowships as well. However, in the context of videoconferencing this rationale becomes blurry as visual information is introduced via video channels. SIDE would predict that

viewing other members reverses the effects of deindividuation by highlighting personal identities over the group, which can result in impolite behavior and members straying from the group. Thus, this has negative implications for self-help groups who have a common goal and shared identity despite their individual differences. On the other hand, social support and self-help group research stress the importance of physical interaction and connection during and after meetings. For example, the visual cues provided in traditional meetings help members feel less isolated and more involved. In other words, being able to see other members in the group on screen during an online meeting, may produce positive effects for group members' perceived effectiveness, small group satisfaction, relational satisfaction, identification, support and network quality, anonymity and access. However, based on these potentially conflicting theoretical interpretations and research findings in the reviewed scholarship, this study explores how social support exists in online 12 step videoconferencing meetings in a recovery based SNS as compared to traditional 12 step meetings.

In sum, the literature presented in this chapter demonstrates a need to conduct more research in online social support. To understand if this recovery-based technology might have the potential to rival traditional meetings, the preceding sections have reviewed theories that have shaped our understanding of computer-mediated communication in health-mediated spaces. As the ensuing rationale suggests, a closer understanding of the perceptions and practices of online 12 step videoconferencing meetings will lead to a deeper understanding of these types of meetings in health care settings and their future impact on individuals and society. In the following chapters, I

outline the method, report the findings of the research questions and hypotheses, and discuss the implications and limitations associated with examining these new practices.

CHAPTER THREE

Methods & Materials

The preceding literature review discussed the importance of social support for healthful living and wellness, specifically for those facing health concerns such as those in recovery from addiction. Research on self-help groups highlights the importance of meeting attendance and the benefits associated with maintaining a supportive network. As abovementioned, meetings are the primary means by which members experience social support and are now available online via videoconferencing technology. According to SIDE, the technology under investigation has the potential to be advantageous in both providing social support and a variety of positive health outcomes for 12 step programs and a wide variety of similar health contexts online. To understand the perceptions of its efficacy, I designed a quantitative study to assess perceptions of meeting effectiveness, small group and relational satisfaction, identification, support and network quality, anonymity and access.

This chapter will detail the study's research design and specifically describe the procedures that were used in collecting data. The following methodological considerations will be discussed: (1) the study design, (2) a description of the subjects that participated in the study, (3) the procedures implemented for collecting data, (4) the operationalization of variables, and (5) the statistical tests used to analyze the results of the survey.

Design & Participants

Following approval by the Institutional Review Board for the Protection of Human Subjects, an email announcement (see Appendix A) containing a link to an online survey utilizing Qualtrics software was sent to the membership base of the most recognized global social networking site for addiction, IntheRooms.com, on February 10th, 2012. Intherooms.com is a non-profit SNS founded in 2009 that in addition to providing a social networking platform for members in recovery, offers twice-daily online videoconferencing meetings (as of October 2011) for Alcoholics Anonymous (AA), Narcotics Anonymous (NA), and (as of March 2012) the Alanon 12 step fellowships. To my knowledge, Intherooms.com was the first organization to offer this technology and is the leading provider of online 12 step videoconferencing meetings.

Additionally, Intherooms.com represents the largest online AA and NA communities in the world with 92,888 AA members and 77,823 NA members (as of June 2012). The site also supports and represents fellowships such as Overeaters Anonymous (OA), Gamblers Anonymous (GA), Marijuana Anonymous (MA), Sexaholics Anonymous (SLAA), and Self Mutilators Anonymous (SMA), among others. The advertisement for the research study was featured in the website's online weekly newsletter and contained a personal message and photo from me. The advertisement or 'entry' was entitled '*Help Us Learn More About Recovery*' and was tailored to the community using 12-step program language (slogans, frequently mentioned desired outcomes) as well as emphasized the anonymous and confidential nature of the data collection. In addition to the email announcement, a description of the study and the link

to the survey were also displayed in both the '*About Me'* section as well as '*status update*' (see Appendix B) section on my own profile on Intherooms.com. A diverse sample of 97 12-step community members (belonging to AA, and or NA) from IntheRooms.com took the survey. Of these 97 members, 33 were male, 37 were female, and 27 did not report their gender. Participants ranged in age from 27 to 72 (M = 52.82 years, SD = 11.27).

Procedure

Prior to filling out the survey online participants were instructed to read and complete a detailed consent form (see Appendix C). In order to maximize participation and avoid participant wear out, the study design contained two versions (see Appendix D) of the same survey; one focused on traditional face-to-face 12 step meetings and the other focused on online 12 step videoconferencing meetings. Members received one of the two versions at random, and therefore were asked about their attendance and perceptions of traditional meetings or their attendance and perceptions of online videoconferencing meetings. The questions were identical on both versions except the participants in the online 12 step videoconferencing meeting version were asked to think about their participation within the SNS, as such they filled out two additional questions. Those questions were about: (a) the frequency of instant message use in meetings and (b) the extent to which they engaged with the different features within the SNS, specifically, whether or not they message a sponsor, sponsee or others in recovery, participate in discussion boards, read discussion boards or blogs, access recovery related information (meeting times or locations), instant message, or other.

Not all members of Intherooms.com join the site to attend online videoconferencing meetings and not all members who attend online videoconferencing meetings attend traditional meetings. Due to this fact and the study's design presenting the two versions at random, participants were first asked whether or not they did in fact attend the meeting format they received. For example, participants that received the traditional meeting version were asked whether or not they attend meetings in person. If not, they were asked to complete the survey based on past meeting attendance or their perception of traditional meetings. Similarly, for the online videoconferencing meeting version participants were asked whether or not they attended online meetings, if not they were asked to complete the survey based on a past experience or their perception of online meetings. Participants were then asked to rate their experience and perceptions of either online 12 step meetings or traditional 12 step meetings (qualified as in person or face-to-face) on the measures described below depending upon which version they received.

Of the 47 members who received the traditional meeting version, 41 confirmed they did in fact attend traditional meetings. These 41 members formed the traditional meeting group (group 1) and the basis for my comparison. The remaining six formed group 2 and were not included in analysis. Of the 48 members who received the online meeting version, 25 reported that they did in fact attend online videoconferencing meetings. As a result, these 25 members formed the online meeting group (group 3) and the remaining group for my comparisons. Lastly, the remaining 23 members who reported they did not attend online meetings (group 4) were not included in analysis.

Open-ended response question. Participants who elected to participate in the survey and did not attend the meeting format that corresponded with the version they received, responded to an open-ended question to provide reasons for not attending. While these responses were not qualitatively coded for the present study, they were collected to supplement and explain the quantitative findings. For the traditional meeting version, six open-ended responses were collected and for the online video conferencing meeting version 24 open-ended responses were collected. Selected quotes appear in the discussion section of this research.

Social Support Variables

Support quality. To address the perceived support quality experienced in meetings for participants in both conditions, support quality was operationalized using Goldsmith, McDermott, & Stewart's (2000) 12 item, seven-point semantic-differential adjective scale which assesses support quality for solving problems, relational assurance, and emotional assurance. The scale contained the following adjective pairs: helpful-hurtful (reverse coded), useless-useful, ignorant-knowledgeable, selfish-generous, supportive-unsupportive (reverse coded), upsetting-reassuring, comforting-distressing (reverse coded), encouraging-discouraging (reverse coded), sensitive-insensitive (reverse coded), heartless-compassionate, considerate-inconsiderate (reverse coded), misunderstanding-understanding. The resulting scale had an $\alpha = .95$, $M = 6.04$, and $SD = 1.01$.

Effectiveness. To address the perceived effectiveness of meetings experienced by participants in both conditions, the overarching concept of effectiveness was

operationalized using three items created for this study. Those included: for staying clean and sober, traditional 12 step meetings are (a) very effective; (b) very helpful; (c) very appropriate. These items were anchored by 1 (disagree) to 7 (agree), and formed a scale with $\alpha = .96$, $M = 5.88$, and $SD = 1.35$.

Small group satisfaction. This measure relied on Anderson, Martin & Riddle's (2001) scale comprised of 12 items: (a) The group members spend time getting to know each other; (b) The members make me feel a part of the group (c) I look forward to coming to the group meetings; (d) I do not feel part of the group (reverse coded); (e) The members make me feel liked; (f) My absence would not matter to the group; (g) I can trust group members; (h) We can say anything in this group without worrying; (i) I prefer not to spend time with members of the group (reverse coded); (j) The members made me feel involved in the group; (k) Some of the group members could become my friends; (l) The group atmosphere is comfortable. These items were anchored by 1 (strongly disagree) and 5 (strongly agree), and the resulting scale had an $\alpha = .93$, $M = 3.75$, and $SD = .76$.

Relationship satisfaction. To address the perceived relationship satisfaction experienced in meetings by participants in both conditions, relationship satisfaction was operationalized using Huston, McHale and Crouter (1986/7) ten-item, seven-point semantic differential scale. The scale contained the following adjective pairs: miserable-enjoyable, hopeful-discouraging (reverse coded), free-tied down (reverse coded), empty-full, interesting-boring (reverse coded), rewarding-disappointing (reverse coded), doesn't give me much chance to stay sober (modified slightly to make the language context

specific to recovery) -brings out the best in me, lonely-friendly, hard-easy, worthwhile-useless (reverse coded). The resulting scale had an $\alpha = .93$, $M = 5.79$, and $SD = 1.30$.

Identification. To address the degree to which participants felt they identified with the group (AA or NA fellowship) in both conditions, I used a slightly modified version of Scott & Stephens (2010) four-item, seven-point Likert-type scale. The items were adapted to represent the context: (a) I feel that I have a lot in common with others in this recovery group; (b) I find it easy to identify with this recovery group; (c) I find that my values and the values of those in this recovery group are very similar. These items ranged from 1 (strongly disagree) to 7 (strongly agree), and created a scale with $\alpha = .81$, $M = 5.71$, and $SD = 1.14$. One item (I view my recovery groups' problems as my problems) was dropped because it led to lower scale reliability and it appeared to be interpreted differently in the current context.

Recovery network quality. This six item, five-point Likert like scale was created for purposes of this project to assess participants' perceived quality of their network (which includes other AA or NA members, sponsors, newcomers, meeting spokespersons, etc.) while attending meetings. While published research has indicated that network quality matters, no existing scales reflected the recovery context. The created items were: Attending traditional 12 step meetings (a) Helps me meet others desiring a clean and sober network; (b) Makes it easy for me to adopt a clean and sober network; (c) Helps me stay in contact with others in recovery; (d) Enables me to meet others in a similar situation; (e) Make me feel accountable for my recovery; (f) motivates

me to stay clean and sober. These items were anchored by 1 (strongly disagree) and 5 (strongly agree), and the resulting scale had an $\alpha = .94$, $M = 4.20$, and $SD = .67$.

Anonymity. To address the perceived anonymity experienced by participants in both conditions, the questions found in Walther and Boyd's (2002) five-item scale were modified. The modifications were made to make the language context specific to 12 step meetings. Those items were: (a) In traditional 12 step meetings, I can say personal things without others knowing who I really am; (b) I can say things anonymously in traditional 12 step meetings; (c) There is less embarrassment being anonymous in traditional 12 step meetings; (d) I always get an opportunity to express myself in traditional 12 step meetings (this item was dropped from the scale to increase reliability); (e) No one knows my true identity in traditional 12 step meetings. These items ranged from 1 (disagree) to 7 (agree), and created a scale with $\alpha = .77$, $M = 4.58$, and $SD = 1.33$.

Access. To address the perceived accessibility of meetings experienced by participants in both conditions, this measure included two items (out of the seven original items) from Walther and Boyd's (2002) scale: (a) Traditional 12 step meetings are very accessible; (b) I feel like I can get help immediately when I need it. These items were chosen because they most accurately reflected the conceptualization of access for the current study. These items ranged from 1 (disagree) to 7 (agree), and created a scale with $\alpha = .78$, $M = 5.94$, and $SD = 1.19$.

Online engagement. The participants level of engagement within the SNS was measured (in the online meeting version) by creating an index of online activities where participants checked all the following that applied; I frequently use IntheRooms.com to

(a) Message my sponsor, sponsee or other members in recovery, (b) attend online meetings, (c) participate in discussion boards, (d) read discussion boards or blogs, (e) access recovery-related information; for example meeting times or locations, (f) instant message with my sponsor, sponsee or other members in recovery, and (g) other. Online participant responses ranged from engaging in 1 activity to 7 activities (M = 2.16, SD = 1.28).

Relevant Demographics

Additional participant information was collected for participants in both conditions, including participant's Internet experience measured on a five-point Likert-type scale 1 (very inexperienced) to 5 (very experienced) (M = 3.71, SD = 1.305). In addition, participants' number of years in recovery was collected (in days, months and years as recognized and celebrated in 12 step fellowships), responses ranged from less than 24 hours in recovery to 37 years in recovery, (M = 9.32 years, SD = 10.12). The distance of how far (in miles) participants lived from the nearest 12 step meeting location was also collected, responses ranged from less than 1 mile to 45 miles (M = 5.69, SD = 7.621).

Statistical Analysis

The primary statistical tests used in this study were independent sample t tests used to understand the differences in the means on two independent groups; traditional 12 step meetings and online 12 step videoconferencing meetings. In addition to the independent sample t tests, bivariate correlations were used to assess the degree to which quantitative variables were related in a sample. Lastly, a linear regression analysis was

used to understand the predictive nature of several independent variables on the outcome of identification.

CHAPTER FOUR

Results

The previous chapter outlined the methodology and the statistical analyses used in the current study. This chapter reveals the findings of the research project as they relate to the variables investigated. The first section of findings focuses on social support. The second section focuses on the differences found between traditional face-to-face and videoconference meeting attendance based on the technology's contextual factors. Please see Table 1, below, for an overview of all the research questions, hypotheses, and whether they were supported.

Table 1

Research Questions, Hypotheses and Results

Research Question/Hypothesis	Result
RQ1: How do 12 step members perceive support quality in online 12-step videoconferencing meetings as compared to traditional 12-step meetings?	Traditional meeting version significantly higher on support quality
RQ2: How do 12 step members perceive online 12 step videoconferencing meetings as an effective tool for recovery-related social support as compared to traditional 12 step meetings?	Traditional meeting version significantly higher on meeting effectiveness
RQ3: How do 12 step members perceive small group satisfaction in online 12 step videoconferencing meetings as compared to traditional 12 step meetings?	Traditional meeting version significantly higher on small group satisfaction
RQ4: How do 12 step members perceive relational satisfaction in online 12 step videoconferencing meetings as compared to traditional 12 step meetings?	Traditional meeting version significantly higher on relational satisfaction
RQ5: How do 12 step members identify with their fellowship in online 12 step videoconferencing meetings as compared to traditional 12 step meetings?	No significant difference between traditional meeting version and the online meeting version
H1: 12 step members who perceive their experience as more effective, satisfying and perceive more support quality will more strongly identify with their support group fellowship.	Supported
H2: 12 step members attending online 12 step videoconferencing meetings will feel more anonymous than 12 step members traditional face-to-face meetings.	Not supported
RQ6: How do 12 step members perceive their recovery network quality in online 12-step videoconferencing meetings as compared to traditional 12-step meetings?	Traditional meeting version significantly higher on recovery network quality
H3: 12 step members will perceive online 12 step videoconferencing meetings as more accessible than traditional face-to-face meetings	Not supported
H4: 12 step members who are more engaged online will perceive their experience as more effective, satisfying and supportive than those 12 step members that are not as engaged online	Supported

Social Support Findings

Support quality. Research question one (*RQ1*) asked, how AA/NA members perceive support quality in online 12-step videoconferencing meetings as compared to traditional 12-step meetings. To answer this question an independent-samples t test was conducted. There was a significant difference between the two groups (traditional and online meeting groups), $t(51) = 2.52$, $p = .015$. Participants in the traditional meeting condition ($M = 6.39$ $SD = 0.70$) on average reporter higher levels of support quality than those in the online videoconferencing condition ($M = 5.79$, $SD = 0.87$). The 95% confidence interval for the difference in the means ranged from .12 to 1.07.

Effectiveness. Research question two (*RQ2*) asked, do AA/NA members perceive online AA/NA meetings as an effective tool for recovery-related social support as compared to traditional AA/NA meetings. To answer this question an independent-samples t test was conducted. The test revealed a significant between groups (traditional and online meeting groups), $t(48) = 5.14$, $p = .000$. Participants in the traditional meeting condition ($M = 6.55$, $SD = 0.72$) on average reported higher levels of effectiveness than those in the online videoconferencing condition ($M = 5.03$, $SD = 1.34$). The 95% confidence interval for the difference ranged from .93 to 2.12.

Small group satisfaction. Research question three (*RQ3*) asked, do AA/NA members perceive small group satisfaction in online AA/NA meetings as compared to traditional AA/NA meetings. To answer this question an independent-samples t test was conducted to test the differences between online and traditional meetings on small group satisfaction. The test revealed a significant difference between groups (traditional and

online meeting groups), $t(54) = 3.46$, $p = .001$. Participants in the traditional meeting condition ($M = 4.103$, $SD = 0.59$) on the average reported higher levels of small group satisfaction than those in the online videoconferencing condition ($M = 3.50$, $SD = 0.59$). The 95% confidence interval for the ranged from .25 to 95.

Relational satisfaction. Research question four (*RQ4*) also asked, how AA/NA members perceive relational satisfaction in online AA/NA meetings as compared to traditional AA/NA meetings. To answer this question an independent-samples t test was conducted to test the differences between online and traditional meetings on small group satisfaction. The t test revealed a significant difference between the two groups (traditional and online meeting groups), $t(54) = 3.46$, $p = .001$. Participants in the traditional meeting condition ($M = 4.103$, $SD = 0.59$) on the average reported higher levels of small group satisfaction than those in the online videoconferencing condition ($M = 3.50$, $SD = 0.59$). The 95% confidence interval ranged from .25 to 95.

Identification. Research question five (*RQ5*) asked, do AA/NA members identify differently with their group members in online meetings than in traditional face-to-face meetings? To answer this question an independent-samples t test was conducted. The test was not significant, $t(48) = 1.37$, $p = .18$. Participants in the traditional meeting condition ($M = 6.10$ $SD = 0.88$) on average did not report higher levels of identification than those in the online videoconferencing condition ($M = 5.68$, $SD = 1.02$). The 95% confidence interval for the difference in the means ranged from -.19 to 1.03.

Predicting Identification. Hypothesis one (H1) stated 12 step members who perceive their experience as more effective, satisfying and perceive more support quality

will more strongly identify with their support group fellowship. To address the hypotheses making predictions about the role identification plays with the key outcomes of this study, first I examined the bivariate correlations.

Table 2

*Correlations among Variables in Traditional Meetings (*N = *41)*

	1	2	3	4	5	6	7	8	9
1. Identification	--								
2. Support Quality	.52***	--							
3. Effectiveness	.62***	.41*	--						
4. Small Group Satisfaction	.55***	.62***	.32*	--					
5. Relational Satisfaction	.45**	.92***	.46**	.64***	--				
6. Recovery Network Quality	.51***	.57***	.48**	.77***	.62***	--			
7. Anonymity	.31	.22	.15	.29	.22	.08	--		
8. Access	.44**	.56***	.54***	.34*	.57***	.35*	.19	--	

Note. $*p < .05$, $**p < .01$, $***p < .001$.

Table 3

*Correlations among Variables in Online Meetings (*N = *25)*

	1	2	3	4	5	6	7	8	9
1. Identification	--								
2. Support Quality	.60*	--							
3. Effectiveness	.72**	.58*	--						
4. Small Group Satisfaction	.60*	.73**	.70**	--					
5. Relational Satisfaction	.70**	.72**	.68*	.72**	--				
6. Recovery Network Quality	.55	.80***	.61*	.67**	.77***	--			
7. Anonymity	.25	-.08	.39	.24	.33	.08	--		
8. Access	.67*	.48	.44	.51	.34	.51	.21	--	
9. Engagement	.57	.53	.70**	.76***	.64**	.65**	.10	.42	--

Note. *$p < .05$, **$p < .01$, ***$p < .001$.

Table 4

*Correlations among the Variables Total (*N = *97)*

	1	2	3	4	5	6	7	8	9
1. Identification	--								
2. Support Quality	.75***	--							
3. Effectiveness	.64***	.57***	--						
4. Small Group Satisfaction	.75***	.79***	.56***	--					
5. Relational Satisfaction	.69***	.90***	.66***	.73***	--				
6. Recovery Network Quality	.69***	.75***	.63***	.82***	.78***	--			
7. Anonymity	.32**	.19	.18	.27*	.20	.08	--		
8. Access	.71***	.69***	.54***	.62***	.65***	.61***	.25*	--	
9. Engagement	.62**	.55*	.62**	.70***	.68***	.65***	.11	.45*	--

Note. *$p < .05$, **$p < .01$, ***$p < .001$. Engagement is only based on the participants in the online videoconferencing version (N = 23).

As seen here, the results of the correlation investigating both meeting formats indicate that identification and effectiveness are significantly correlated, Pearson's *r* =.56, *p* =.000. The results of the second bivariate correlation indicate that identification and both relational satisfaction (Pearson's *r* =.69, *p* = 000) and small group satisfaction (Pearson's *r* =.75, *p* = 000) are also significantly correlated. Identification and support quality are also significantly correlated, problem-solving utility (Pearson's *r* =.68, *p* = 000), emotional support (Pearson's *r* =.66, *p* = 000) and relational support (Pearson's *r*

=.70, p = 000). These results suggest that the more identified one feels in his or her 12 step fellowship, the more effective, satisfied, and supportive one perceives his or her experience to be.

To compare how these independent variables predicted identification, I conducted a linear regression. The overall model was significant $F(4, 61) = 29.51, p < .001$. The four variables, satisfaction, small group satisfaction, effectiveness, and support quality explained 67% of the variance in identification, $R^2 = .67$, indicating that members who perceive their experience as more effective, satisfying as well as perceive more support quality in 12 step meetings will more strongly identify with their support group fellowship such as AA or NA. Support quality had the highest impact in predicting identification ($\beta = .54$ $p < .01$), small group satisfaction had the second highest impact, ($\beta = .38$ $p < .01$), and perceived meeting effectiveness also significantly predicted identification ($\beta = .29$ $p < .01$).

However, as indicated in the table below, not all variables in the regression were statistically significant. Namely, relational satisfaction was not statistically significant (β = -.29 p = ns). Despite the correlation between relational satisfaction and identification being positive, the Beta coefficient was negative and insignificant. Thus, there appears to be a negative net suppression (Krus & Wilkinson, 1986) occurring in the model. However, the collinearity diagnostics—both the Tolerance (TOL) and Variance Inflation Factory (VIF) tests—showed an acceptable amount of collinearity between the predictor variables (Cohen, Cohen, West, & Aiken; 2003). The TOL ranged from .16 to .56 and VIF ranged from 1.7 to 6.22. Table 4 displays the results of the regression.

Table 5

Hierarchical Regression Predicting Identification (N = 61)

Predictor Variables	β	R^2
Relational Satisfaction	-.29	
Small Group Satisfaction	.38**	
Effectiveness	.29**	
Support Quality	.54**	
Total Adjusted R^2		.65

Notes. Total R^2 = .67; adjusted R^2 = .65. F (4, 61) = 29.51, *p < .05, **p < .01, ***p < .001

Recovery network quality. Research question six (*RQ6*) asked, how AA/NA members perceive their recovery network quality in online 12-step meetings as compared to traditional 12-step meetings. To answer this question an independent-samples t test was conducted. The test revealed a significant difference between the two groups (traditional and online meeting groups), $t(55) = 3.84$, $p = .000$. Participants in the traditional meeting condition ($M = 4.5$, $SD = 0.49$) on the average reported higher levels of a quality recovery network than those in the online videoconferencing condition ($M = 3.94$, $SD = 0.51$). The 95% confidence interval for the difference in the means ranged from .27 to .84.

Differences Between Traditional and Online Meetings on Contextual Factors

Anonymity. Based on the anonymity literature in online social support groups, hypothesis two (H2) predicted that 12 step members attending online videoconferencing meetings will feel more anonymous than 12 step members traditional face-to-face meetings. To test this prediction an independent-samples t test was conducted to test the differences between online and traditional meetings on anonymity. Contrary to my prediction, the test found no significant difference between the groups, $t(24.6) = -1.15$, $p = .26$. Participants in the traditional meeting condition ($M = 4.51$, $SD = 1.43$) did not report a significant difference on their perceptions of anonymity when compared to the videoconferencing condition ($M = 4.96$, $SD = 1.07$). Thus, hypothesis H2 was not supported. The 95% confidence interval for the difference in the means ranged from -1.24 to .35.

Access. Hypothesis (H3) predicted that 12 step members would perceive online videoconferencing meetings as more accessible than traditional face-to-face meetings. To answer this question an independent-samples t test was conducted to test the differences between online and traditional meetings on perceptions of access. The test was not significant, $t(48) = .44$, $p = .66$. Participants in the traditional meeting condition ($M = 6.37$, $SD = 0.88$) did not differ significantly from the online 12 step videoconferencing condition ($M = 6.25$, $SD = 0.50$). The 95% confidence interval for the difference in the means ranged from -.42 to .65.

Engagement. Hypothesis four (H4) predicted that 12 step members who are more engaged online will perceive their experience as more effective, satisfying and supportive than those 12 step members that are not as engaged online. To test this

hypothesis a series of bivariate correlations were conducted. The results of the correlations indicate that engagement is significantly correlated with effectiveness, Pearson's r =.62, p = .002, small group satisfaction, Pearson's r =.70, p =.000, relational satisfaction, Pearson's r =.68, p =.000 and support quality, Pearson's r =.55, p =.011.

CHAPTER FIVE

Discussion

Social support is an integral part of the healing process for individuals facing immediate and progressive health problems. With increased use of online social support and the introduction of online videoconferencing meetings in self-help groups, it is important for scholars to better understand the advantages and disadvantages associated with these technology advancements for persons directly and indirectly suffering from health issues. The primary purpose of this exploratory research was to understand the differences between traditional 12 step meetings and online 12 step videoconferencing meetings and extend our current understanding of online social support and anonymity in this new environment. Therefore, this study investigated the relationship between 12 step meeting format and members' perceptions meeting of support quality, anonymity, identification, access, recovery network quality effectiveness, small group satisfaction, relational satisfaction, and engagement. To accomplish this, I drew from the framework of social support and the social model of deindividuation effects (SIDE).

Findings suggest that the traditional meeting format supersedes the online videoconferencing meeting format in a number of ways. Traditional meetings provide significantly higher support quality, small group satisfaction, relational satisfaction, recovery network quality and meeting effectiveness than online meetings. Secondly, findings suggest members' perceptions of small group satisfaction, relational satisfaction, support quality, and network quality are significant predictors of identification within a 12 step group. Third, findings suggest that online meetings do not offer additional

affordances of anonymity and access as hypothesized. Lastly, members' level of engagement within the SNS is strongly correlated with a number of positive outcomes. This suggests that the more engaged a member is with various features within a SNS, the more social support and recovery benefits a member perceives. In sum, this study advances practical understanding of the role SNS and online videoconferencing meetings have in shaping the experiences of members in recovery. In this final chapter, these findings are discussed further as well as the study's limitations and theoretical and practical implications.

Traditional Versus Online Videoconferencing Meetings

Statistical analysis revealed that participants' perception of support quality, recovery network quality, effectiveness, small group and relational satisfaction were statistically significantly higher for traditional 12 step meetings than online 12 step videoconferencing meetings. Specifically these findings reveal, for example, group members feel they spend more time getting to know each other, feel more a part of the group, look forward to coming to the meetings more, feel more liked, can trust group members more, feel they can say anything in the group without worrying, feel more involved, feel more group members could become their friends, and feel the group atmosphere is more comfortable in traditional meetings. To illustrate further, members attending traditional meetings felt they could more easily meet others desiring a clean and sober network, ultimately making it easier for them to adopt a clean and sober network. Attending traditional meetings compared to online meetings also helped members stay in better contact with others in recovery further enabling them to meet others in a similar

situation, which in turn makes them feel both more accountable and motivated to stay clean and sober. What these findings suggest is that based on the current sample we have not yet seen a shift in members' preference for seeking or receiving social support online, or more specifically, seeking or receiving social support in online meetings. Traditional meetings in 12 step programs still matter a great deal and have a bigger impact for members' recovery in this community. These findings are supported by some of the open-ended responses that were generated during data collection. For example, the following participant explained that online videoconferencing meetings,

> "... do not provide the same impact as 'live' meetings. As an alcoholic with 20 years of 'live' meetings behind me I derive no emotional experience from an online meeting. The immediacy of face-to-face contact is missing along with the physical presence of another human being. Attending a live meeting gives me a feeling that is somewhat akin to showering. I leave the meeting feeling refreshed. Because my drinking and, consequently, my life, was so isolated, I enjoy the personal closeness of other alcoholics."

This quote highlights the importance of human contact, as well as the addict's physical network or 'fellowship.' This idea supports prior research that emotional support is largely found in non-verbal communication (Goleman, 1995) and can be experienced to a greater extent in traditional meetings alongside other types of social support. Similarly, other participants affirm the importance of face-to-face contact and non-verbal cues when maintaining sobriety and serenity among the fellowship of others. Another study participant said, "I have been sober for 23+ years in AA, and I enjoy the face-to-face element of the fellowship" and "I am fortunate to live in a place that has lots of meetings. I find the fellowship of in person meetings more helpful to my recovery." Taking these perspectives and findings into account, it seems there is not a great need for

the members in this community to attend online videoconferencing meetings because traditional meetings provide such high levels of support quality, recovery network quality, effectiveness, small group and relational satisfaction among 12 step fellowships.

However, it is worthy to note that despite the significant difference in several types of support outcomes examined in this study, the means were quite high for the dependent variables in both meeting formats. Additionally, regardless of the meeting format, members identified with the group fellowship highly. Overall, this finding is promising for health communication researchers and practitioners, as this suggests that people have positive perceptions with their recovery experience in both traditional and videoconferencing meeting formats. This corroborates prior research that 12 step fellowships have been shown to produce positive impressions and results (Bond, et al., 2003; Kaskutas, et al., 2002; MacDonald, 1987; Ouimette, et al., 1997; Rosenberg, 1983). This is also consistent with telemedicine literature, which suggests that patients are satisfied with their tele-experiences and face-to-face health care encounters are not always the gold standard (Bashshur, et al., 1997; Gutske, et al., 2000). In brief, this finding extends this line of research by introducing a new online format that also achieves positive perceptions for members in recovery.

In spite of this, a more in depth understanding of why the differences exist is warranted. Qualitative approaches such as interviews or focus groups might uncover more specific reasons for why group members trust other members more face-to-face over videoconference, or why members feel safer and less worried to confess or disclose personal information in traditional meetings than in online meetings. This finding is

contrary to previous research, as the anonymity component of online social support has been found to greatly reduce stigma and calm participants' fears (Ferguson, 1997; Galinsky, et al., 1997; Klemm & Nolan, 1998; Wright, 2000). However, it seems the traditional 12 step meeting intrinsically safeguards against stigma thus offers no additional advantage for signing online. The lack of advantages for attending online 12 step meetings in this context can also be explained further when discussing anonymity.

Anonymity Within the Group and the Relevance to the Outside World

Anonymity is often referred to as the greatest single protection in a 12 step fellowship, and in this study I found there was no significant difference in perception of anonymity between the traditional meeting and videoconferencing meeting groups. This finding, in the context of a support group that privileges anonymity, challenges current theoretical arguments, which suggest that online social support is more anonymous than traditional face-to-face interactions (Walther & Parks; 2002). This anomaly is likely unique to the community under investigation and other 12 step programs. More importantly, this discrepancy highlights a unique opportunity for studying anonymity in the context of online 12 step fellowships as the concept of anonymity appears to be much more nuanced.

It is quite possible that anonymity as it is operationalized as a computer-mediated concept in this study functions differently in traditional 12 step programs as compared to other self-help groups online. As such, this phenomenon may not translate to other types of self-help group meetings. The reason for this is because fellowships such as AA/NA do not have a strong need to remain anonymous among one another in

meetings. In fact, members rejoice in and improve by getting to know one another. However, it is more important for a member to safeguard their anonymity outside of meetings and not expose their anonymous peers. It is quite possible, and perhaps likely then, that personal anonymity is of much greater significance *outside* the fellowship compared to within. For this reason, perhaps SIDE and its reliance on anonymity during group interactions to make predictions does not explain this context as well as other online contexts. As such, the anonymity that online videoconferencing meetings can provide might not be as advantageous as scholars would predict for this community.

Access to Meetings

Another finding of the study revealed that access immediacy was not perceived to be different between the two meeting formats. While access has been the hallmark of online social support, this study did not find a significant difference between the traditional and online videoconferencing meetings. Perhaps the reason for this finding is 90% of participants reported living within ten miles of a traditional meeting, with the average distance reported as $M = 5.69$ ($SD = 7.621$) miles. As such, members might not feel inconvenienced when trying to attend a meeting in their hometown, thus further inhibiting the motivation to attend online. Additionally, it is logical to assume participants receiving the traditional meeting condition independent of the online condition rated their access to meetings higher than they would have if asked to compare the two formats exclusively. Future studies should modify quantitative or qualitative methodologies to address this inquiry. Another explanation for no difference between the two meeting formats on access immediacy may be the limited meeting times offered

online throughout the course of a day. Commentary from my open-ended response confirms the belief that online videoconferencing meetings have not caught up to the number of traditional meeting offerings, which may affect feelings of access immediacy at this point in time,

> "I live in NYC. There are literally thousands of meetings to attend on a daily basis. The first meeting of the day starts at 6am and the last one ends AFTER 3am. Under those circumstances, I feel like attending an online meeting would be a form of isolation. It prevents me from doing service, something I do at a few of the meetings I attend (chairing, greeting, literature, and buying coffee cups are my current commitments). In close to 3 years of sobriety, the one and only time I attended an online meeting was when I was too sick to leave my apartment. It was a chatroom-style meeting. Though I did participate, I can imagine easily not being part of it."

Similarly, another participant stated that online meetings "seem less personal than attending meetings at my home group. Should I find myself without a meeting to attend I would definitely check it out though." Collectively, findings from the current study propose that if members have limited traditional meeting options (such as only one meeting a week in small, rural counties), have other health or time restraints (such as illness or individuals traveling for work), and financial or mobility restrictions (such as limited transportation funds or suspended drivers license), online videoconferencing meetings could prove to be a great alternative.

Another possible explanation for this finding is that online videoconferencing meetings might not be offered during ideal times for people living outside the United States or in different time zones. Researchers have cited online social support as advantageous because it is void of geographical and temporal time restraints (Dublin, et al., 1997; Mickelson, 1997; Weinberg, et al., 1995), as individuals half way across the

globe can build conversations or exchange social support anytime. As Mitchell (1995) describes further, participant location is irrelevant and in many cases not disclosed in online social support. However, this study challenges these arguments. This research reveals that location and time can actually impede meeting attendance for those who are not co-located in similar time zones or countries. As this is a global community, participant comments for not attending online videoconferencing meetings included, "time differences as I live in Australia," and "not living in US and find the times do not suit this side of the world." Naturally, as these members point out, perceptions of access immediacy to social support are different when it comes to online meetings as opposed to other forms of text-based social support online.

In much the same way, the global temporal and geographical restraints discovered in online meetings can in fact hinder another heavily cited advantage of online social support, access to greater diversity in network contacts with different social, cultural, or geographic backgrounds (Rice & Katz, 2001; Wellman, 1997; Wright & Bell, 2003). As such, it appears that moving 12 step recovery meetings to an online format without considering time zone and language differences accomplishes no additional access advantages to social support. However, future studies may find that increased experience with the SNS, improved online videoconferencing meeting times (nationally, globally and in multiple languages) as well as an opportunity for greater access via mobile phones and applications may sway these results in a new direction.

Theoretical Implications

Online social support. This study contributes to the growing body of literature that describes and theorizes about how people use online social support to manage their health. Although influential work within online social support affirms positive results in computer-mediated spaces for individuals with cancer, diabetes, AIDS, obesity, and disabilities, (Alexander, et al., 1999; Braithwaite, et al., 1999; Brashers, Neidig, Goldsmith, 2004; Preece & Ghozati, 2001; Sullivan, 1997; Wright, 1999, 2000a, 2000b) this study expands on this work to include individuals in both recovery and videoconferencing meetings. The results of the current study are consistent with the social support framework as members have positive impressions about their social support experiences in recovery, but also suggest that the fundamental characteristics of online social support might not be as advantageous to this community as one might think.

Therefore, scholars need to consider when an online support group is an advantage, when it is not an advantage, and for whom it is an advantage. Online social support may be more of an advantage for those individuals whose health condition does not offer traditional support meetings, for example patients living with chronic skin disease such as psoriasis. Despite efforts from the medical community to offer a variety of treatment options for psoriasis patients, research notes treatment plans frequently fail to address the emotional welfare of patients (Shereene, Kvedar, & Watson, 2009). This oversight can greatly affect the quality of life for patients suffering from psoriasis where relapse is often uncontrollable and a constant psychological and physical burden. Therefore, the reduced stigma, 24 hour access and anonymity experienced in online

social support become much more advantageous for those with rare conditions where self-help group meetings addressing their unique concern are scarce.

SIDE. Although there is extensive empirical research in interpersonal communication that has relied on the SIDE model to influence group and relational dynamics in CMC (Douglas & McGarty, 2001; Lea & Spears, 1992; Lea & Spears, 1995; Lea, Spears, & de Groot, 2001; Reicher, et al., 1995), few if any studies have investigated the model in health contexts, and none have investigated how SIDE functions in online videoconferencing self-help group meetings. One of the major contributions the SIDE model makes to CMC literature is highlighting the importance of anonymity for groups to form a common identity, which results in liking and optimistic and constructive communication among group members. This theoretical explanation can be extended to online social support and self-help groups communicating online as well. However, this model suggests that visual identifiability can impede group norms that can result in negative communication patterns and perceptions of the group as a whole. Such the case would be in an online meeting where members' varying degrees of presence might affect group interactions and outcomes, i.e. not forming a common identity with the group.

The research presented here, however, suggests that the idea of anonymity and visual information exchanged between members in this context may not be as simple, or even as much of a concern, as originally theorized in this model. There is a limited amount of visual information available in an online meeting because not all members will contribute or appear on video, nor will all members be viewable at once during the course of the hour-long meeting. However, in the 12 step context, this varying degree of visual

information provided in meetings does not seem to affect members' experiences or communication one way or another. Additionally, SIDE may not appropriately assess the complexity of anonymity in this context. As we have seen, anonymity functions differently in 12 step contexts than in other self-help groups online. This study helps contribute to this body of knowledge by introducing the dual meaning of anonymity for both traditional and online self-help groups--one meaning refers to maintaining anonymity within the fellowship itself and one meaning referring to remaining anonymous *outside* the fellowship. Thus, it will be important for health communication researchers to continue studying and theorizing about how people can best use these technologies when trying to maintain their health and well-being.

Limitations

All research is subject to limitations, and this exploratory study is no exception. As such, the findings of this study provide valuable insights into the ways in which 12 step members engage in SNS and perceive videoconferencing meetings as useful for recovery but they must be qualified by some important limitations. First and foremost, this study suffered from a small sample and unequal numbers of people completed the online meeting and the face-to-face meeting versions of the surveys. While the data collection software was set to randomize the two conditions, many participants exited the survey asking their opinion about the online meeting format. A possible explanation for this behavior is that while organizational leaders reported 25,000 unique participants to their online videoconferencing meetings in January 2012 (the survey was released in February, 2012), the technology had only been available for approximately four months.

In other words, members' lack of experience with the technology might explain why they were reluctant to participate in this condition and data collection suffered as a result. Thus, it would be advantageous to collect more data in the future to safeguard against members' apprehension and inexperience, as well as increase statistical power.

Second, my results may not be representative due to the small sample size overall ($N = 97$) and the fact that I only included participants from a single organization. Future iterations of this study should, again, strive to maximize sample size. However, this research did produce significant differences between the two groups. Despite the small sample size, the sample is quite diverse and representative of all types of members in recovery. This fact is illustrated in the standard deviations of the sample demographics (as seen in Chapter Three). For example, recovery ranged from 24 hours in recovery to upwards of 37 years in recovery, ($M = 9.32$ years, $SD = 10.12$) and participants ranged in age from as young as 27 years of age to 72 years of age ($M = 52.82$ years, $SD = 11.27$).

Further, it should be noted that while I had several members start the survey ($N = 117$), perhaps not surprisingly, several members dropped out of the survey or skipped entire questions, which limited the amount of usable data for analysis. Like most survey methodologies, this could be attributed to time constraints and or short attention spans of the participants (Babbie, 2009). However, both the anonymous nature of the group and sensitive nature of the questions could be to blame for the ill retention. Despite these limitations, the method and findings presented here are useful to begin an understanding in this new line of research.

Directions for Future Research

As health communication research on online social support, SNS, mobile communication and online videoconferencing meetings evolves, there are a number of questions that researchers have yet to answer. This is the first study that ventured to ask about the differences in members perceptions of traditional versus online videoconferencing meetings in 12 step fellowships on a number of interpersonal and health outcomes. The overarching question that remains is can the recovery experience be duplicated online, and if not, what are the implications of the differences between traditional and online videoconferencing meetings? The present study suggests there are three main areas that need to be addressed when pursuing these larger questions: social support experience, logistics, and interactivity.

First, we know that the social support experience of face-to-face meetings is perhaps one of the most vital components of the recovery process. This experience includes the rituals and practices associated with attending traditional meetings such as sharing and listening and the opportunity for building a clean and sober network. For example, during face-to-face meetings members often congregate around the coffee pot or smoke cigarettes in the parking lot before and after meetings. This provides opportunities for members to meet new sober friends, approach a sponsor, exchange contact information, and plan social activities outside of meetings. While some experiences such as exchanging contact information are easily replicated online, others such as volunteering to set up chairs before a meeting are not.

What future research needs to address is whether online videoconferencing meetings can match the richness and quality of the social experience for members attending traditional meetings. For example, future studies should attempt to capture additional information about how members serve in online meetings. Similarly, an important yet related question that stems from this research and new technology is whether adopting a sober network online removes the member's perceived need for changing their circle of friends. Understanding how personal networks are formed differently in these meetings will be noteworthy in future studies. Perhaps the online meeting experience will adapt and make up for the social support experience differences in new ways. Understanding what the implications are of these fundamental differences will be a fruitful area of research for health communication scholars.

The second line of questioning that emerges from this exploratory research stems from the logistics of participation in online meetings. In the online meetings observed in the present case, there are often 150+ people in attendance. This number fluctuates throughout the meeting as members sign in and drop out due to a loss of connection or personal interruptions at home. Rarely, if ever, do members attending traditional meetings step out to take a phone call, leave early, or multi-task during the meeting. These behaviors may have negative implications for online videoconferencing meetings just as they do in traditional organizational meetings (Stephens & Davis, 2009). As cited previously, the effectiveness of AA/NA is greatly correlated with not only attending meetings but also participating (Kaskutas, et al., 2001). As such, it is important to

understand how participation and size of the group play a role in online videoconferencing meetings and how that affects the experience of social support.

Prior research suggests there is more equal participation in videoconferencing meetings and that participation is more 'polite' and 'orderly,' ultimately allowing more members to be share and be heard (Fulk & Collins-Jarvis, 2001). However, logistically speaking, how can members best participate when there are 150 members in attendance? Accordingly, future studies should incorporate measures of participation within online videoconferencing meetings. Perhaps researchers will learn that a combination of both traditional and online meetings will make up for the lack of participation opportunities in online meetings. Furthermore, it is quite possible that the order in which members are first exposed to meetings will influence their perceptions. For example, if a member first attends an online meeting prior to a traditional meeting, it is plausible they may feel the traditional meeting is small, inconvenient and too intrusive. It is worth mentioning, that this study could have been improved by including a more sound measure of meeting attendance frequency. Future studies should strive to understand how attendance behaviors, attending bi-weekly or intermittently, impact outcomes. In sum, researchers need to try to better understand how the characteristics and dynamics of online meetings, as well as the behaviors of participants, shape members' perceptions. Answers to these questions will provide deeper insights into the available forms of recovery-related communication and social support online.

The Interactivity of Social Networking Sites as a Source of Social Support

As outlined in chapter four, results suggest that members' level of engagement within the social networking site is highly correlated with a number of positive outcomes. In other words, the more members interacted with the SNS, such as messaging their friends, searching for information, attending videoconferencing meetings, or listening to speaker tapes, the more they were satisfied, felt their recovery experience was effective, and their perceptions of support quality were enhanced. While the videoconferencing meetings have not quite reached the level of traditional meetings, this finding suggests that SNS can provide high levels of social support in the recovery process when participants have a high level of engagement and interactivity. This finding is similar to 12 step research which suggests that high levels of engagement and participation in meetings as well as an extensive network of sober contacts has positive outcomes (Bond, et al., 2003; Emrick, et al., 1993). One participant admitted, "I don't do online mtgs it's usually a time thing, I'm not available and don't really know where online they are to join. But i do listen to speaker tapes online those are the BEST cause i can listen while i do something else." This open-ended response suggests that resources made available on the SNS, such as speaker tapes and daily affirmations for example, are a valuable tool that one might not receive offline. Investigating unanticipated and nuanced advantages such as these could open up a new line of research for organizational, technology and health communication scholars alike. While not the focus of this research, this has important implications and promising practical application for future studies in which scholars

should rely on interactivity research to explore the connection to social support in health mediated spaces as well as investigate new variables such as time spent online.

Extending Online Social Support Beyond Recovery Self-Help Groups

Lastly, one obvious direction for future research is to examine online videoconferencing meetings for other groups, such as cancer support groups, to determine whether the patterns found here are generalizable. According to SIDE, we might expect some variation in member responses due to the different social identities that are salient to each health group, e.g. male dominant views in prostate cancer groups versus anonymity in 12 step fellowships. In this case, 12 step fellowships place a high degree of importance on anonymity and are often more stigmatized for their (in)ability to control their disease (Valverde, 1998) as opposed to cancer patients whose progression is out of their control. However, there are some stigmatized diseases that are considered more 'blameworthy,' such as obesity and AIDS and these groups might be more closely related to 12 step fellowships as they face similar prejudice for their lifestyles. It is important for scholars and practitioners to learn the differences between self-help groups to determine what type of meeting (online or traditional) serves each community best.

Currently, this research suggests that online videoconferencing meetings are not yet ideal when compared to face-to-face, but they may be beneficial as a supplementary option or for those persons with disabilities, or those with financial, time, or transportation constraints. Data collection within this study was void of disability and financial demographic information; future studies should attempt to collect this type of information. However, an open-ended response confirms my suspicions "Time does not

permit it and I am disabled," and similarly "I work a lot and care for my elderly mother, and sometimes I find it difficult to even exercise." Future research should address these circumstances to garner better understanding for which population(s) online social support would be most advantageous.

Conclusion

Despite 12 step communities' (AA, NA, Alanon, etc.) unique differences, this study's results can become generalizable to additional fellowships utilizing online videoconferencing meetings such as the following; overeaters anonymous, narcotic anonymous, nicotine anonymous, gamblers anonymous, eating disorders anonymous, self mutilators anonymous, and other highly stigmatized health concerns such as obesity, and AIDS. As more and more individuals seek out information and support online, it becomes imperative to understand the advantages and limitations associated with new technologies offering such support. While the traditional meetings still supersede members' perceptions of support quality, recovery network quality, effectiveness, small group and relational satisfaction at this point in time, it is clear that the online videoconferencing meetings and social networking sites are a valuable resource for social support and social connection in recovery.

In sum, although the Internet has done much to enhance our ability to receive social support and engage in interpersonal communication across time and distance, questions still remain when discussing the differences, advantages and disadvantages of face-to-face and online communication. The research presented here was the first to question whether online support in videoconferencing meetings has the ability to reach,

or exceed, the benefits received in face-to-face recovery interactions. However, I have only begun to scratch the surface for understanding social support in social networking sites and online videoconferencing meetings. The possibilities associated with these new technology practices in health contexts will continue to expand and evolve. In conclusion, people with addictions are more likely to be injured, to harm themselves deliberately, to have health complications and threaten the health of others. Therefore, it is essential that social support research not only continues to expand and evolve in 12 step fellowships to reduce and prevent further complications and suffering, but also to include all self-help groups.

Appendix A

Email not displaying correctly? View it in your browser.

THE H.I.T.C.H.

INTHEROOMS COMMUNITY NEWS

Follow us on Twitter | Become a Fan on Facebook | Friend our Myspace

Submit a Story to The H.I.T.C.H.

Have something to share with our community? Click Here to submit a story to our newsletter.

Book of the Month

If The Drugs Dont Get U The Lifestyle Will
Roxanne C. Fredd

Click Here to Buy Now

Most Active Member of the Week

ivan_etoher

Anniversaries This Week (11816 Years of Recovery) sinnesro has 39

Help Us Learn More About Recovery

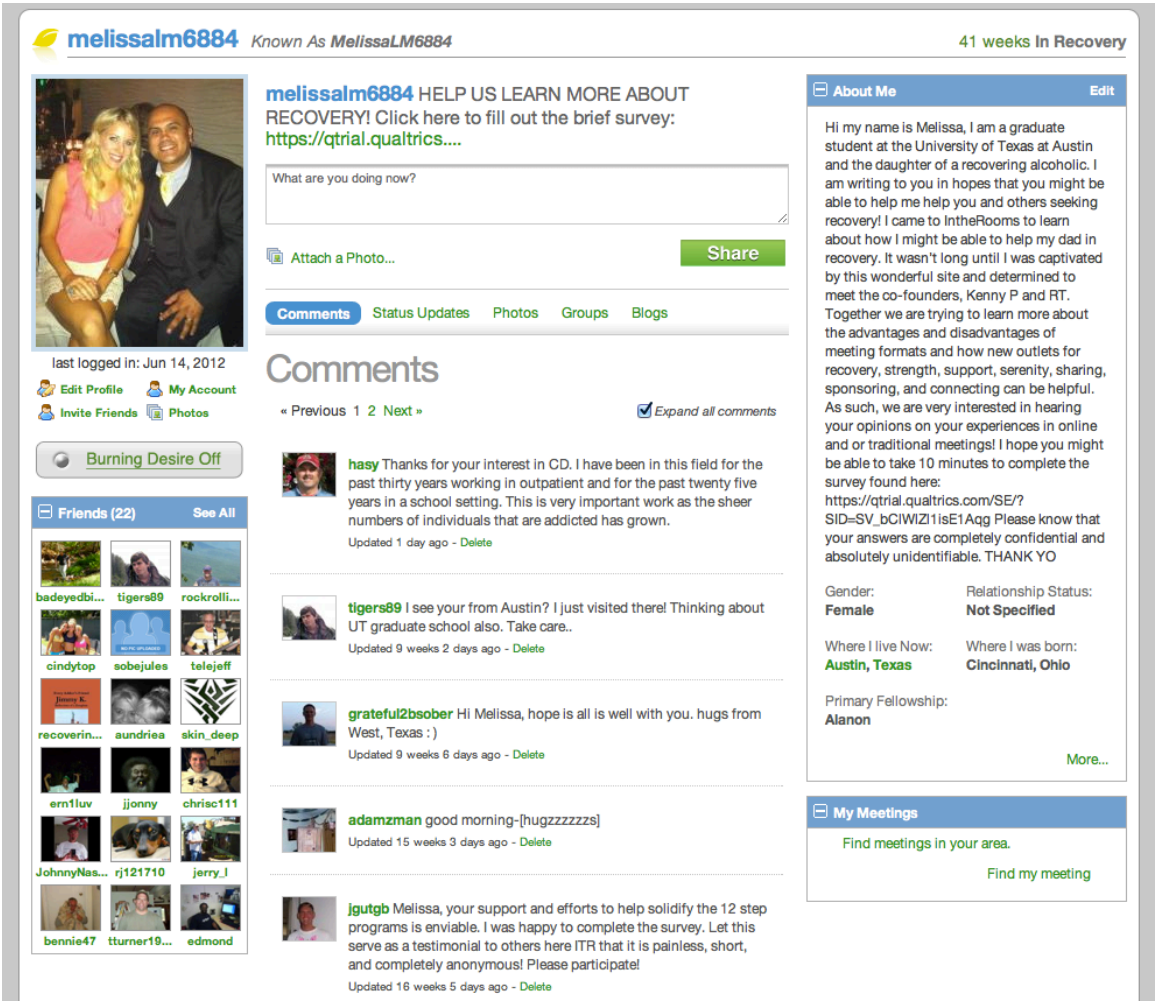
Submitted by melissalm6884 on February 10, 2012

Hi my name is Melissa, I am a graduate student at the University of Texas at Austin and the daughter of a recovering alcoholic. I am writing to you in hopes that you might be able to help me help you and others seeking recovery! I came to IntheRooms to learn about how I might be able to help my dad in recovery. It wasn't long until I was captivated by this wonderful site and determined to meet the co-founders, Kenny P and RT.

Together we are trying to learn more about the advantages and disadvantages of meeting formats and how new outlets for recovery, strength, support, serenity, sharing, sponsoring, and connecting can be helpful.

Read More...

Appendix B


melissalm6884 Known As MelissaLM6884
41 weeks In Recovery
last logged in: Jun 14, 2012
Edit Profile
My Account
Invite Friends
Photos
Burning Desire Off
Friends (22)
See All
badeyedbi...
tigers89
rockrolli...
cindytop
sobejules
telejeff
recoverin...
aundriea
skin_deep
ern1luv
jjonny
chrisc111
JohnnyNas...
rj121710
jerry_l
bennie47
tturner19...
edmond
melissalm6884 HELP US LEARN MORE ABOUT RECOVERY! Click here to fill out the brief survey: https://qtrial.qualtrics....
What are you doing now?
Attach a Photo...
Share
Comments
Status Updates
Photos
Groups
Blogs
Comments
« Previous 1 2 Next »
Expand all comments
hasy Thanks for your interest in CD. I have been in this field for the past thirty years working in outpatient and for the past twenty five years in a school setting. This is very important work as the sheer numbers of individuals that are addicted has grown.
Updated 1 day ago - Delete
tigers89 I see your from Austin? I just visited there! Thinking about UT graduate school also. Take care..
Updated 9 weeks 2 days ago - Delete
grateful2bsober Hi Melissa, hope is all is well with you. hugs from West, Texas :)
Updated 9 weeks 6 days ago - Delete
adamzman good morning-[hugzzzzzzs]
Updated 15 weeks 3 days ago - Delete
jgutgb Melissa, your support and efforts to help solidify the 12 step programs is enviable. I was happy to complete the survey. Let this serve as a testimonial to others here ITR that it is painless, short, and completely anonymous! Please participate!
Updated 16 weeks 5 days ago - Delete
About Me
Edit
Hi my name is Melissa, I am a graduate student at the University of Texas at Austin and the daughter of a recovering alcoholic. I am writing to you in hopes that you might be able to help me help you and others seeking recovery! I came to IntheRooms to learn about how I might be able to help my dad in recovery. It wasn't long until I was captivated by this wonderful site and determined to meet the co-founders, Kenny P and RT. Together we are trying to learn more about the advantages and disadvantages of meeting formats and how new outlets for recovery, strength, support, serenity, sharing, sponsoring, and connecting can be helpful. As such, we are very interested in hearing your opinions on your experiences in online and or traditional meetings! I hope you might be able to take 10 minutes to complete the survey found here: https://qtrial.qualtrics.com/SE/?SID=SV_bClWIZl1isE1Aqg Please know that your answers are completely confidential and absolutely unidentifiable. THANK YO
Gender:
Female
Relationship Status:
Not Specified
Where I live Now:
Austin, Texas
Where I was born:
Cincinnati, Ohio
Primary Fellowship:
Alanon
More...
My Meetings
Find meetings in your area.
Find my meeting

Appendix C

You are being asked to participate in a research study. *Thank you in advance for your time!* This form provides you with information about the study. Your participation is entirely **VOLUNTARY** and please know that **NO identifying information will be collected**. You can stop your participation at any time. To do so, simply stop taking the survey and close your browser window.

The purpose of this study is to learn more about meeting formats in 12 step recovery. This study will benefit the researchers and participants like you by providing valuable information about the effects of online and traditional meetings, which will in turn inform best practices and practical applications for recovery related organizations, health institutions and those suffering from addiction. **It is our hope that we can learn how to best use these new recovery tools to help change members' lives for the better!**

If you agree to be in this study, we will ask you to do the following things:

- Answer questions about your perceptions of meetings (e.g. satisfaction, effectiveness, helpfulness, etc.)
- Answer questions about your experience with meetings
- Fill out NON-IDENTIFYING demographic information

TOTAL ESTIMATED TIME TO PARTICIPATE IN THIS STUDY IS APPROXIMATELY 10 MINUTES

Risks/Benefits/Compensation of being in the study:

- The risk associated with this study is no greater than everyday life. If you wish to discuss the information above or any other risks you may experience, you may email the Principal Investigator, Melissa, contact info listed below.
- There are no benefits of being in this study.
- There is no compensation for being in this study.

Anonymity and Privacy Protections:

- The surveys will be collected online *and no identity information* will be required.
- These surveys will be kept in a secure location, and will only be used for research purposes by the investigators in this study.
- To make possible future analysis the investigators will retain the surveys.
- All answers will be completely **CONFIDENTIAL and ANONYMOUS**. There are no anticipated conditions for breaking this confidentiality.

The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

Authorized persons from The University of Texas at Austin, members of the Institutional Review Board, and (study sponsors) have the right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject.

Contacts and Questions:

If you have any questions about the study please email the primary researcher, Melissa Murphy. If you have questions later, want additional information, or wish to withdraw your participation call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the bottom of

this page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects or the Office of Research Support at (512) 471-8871 or email: orsc@uts.cc.utexas.edu.

Conducted By:

Melissa Murphy, Masters Student, melissa.murphy01@gmail.com, 513-600-8585
Dr. Keri K. Stephens, Faculty sponsor, keristephens@mail.utexas.edu
The University of Texas at Austin, Communication Studies Department, (512) 471-5251.

Appendix D

By clicking YES, you have agreed to participate and you may begin the study. Thank you for your participation! *To move the survey forward, click the arrow >>

- ❍ Yes (1)
- ❍ No (2)

Q2 Do you attend traditional 12 step meetings in person to help you in the recovery process? If no, please do your best to complete the rest of the survey based on past experiences and what you know and or feel about traditional meetings.

- ❍ Yes (1)
- ❍ No (2)

Q3 If you DO NOT attend traditional 12 step meetings in person, would you please share with us why not? Please answer as honestly and as best you can in the space provided below.

Q4 How often do you attend traditional 12 step meetings?

- ❍ More than once a day (1)
- ❍ Everyday (2)
- ❍ 4-5 times a week (3)
- ❍ 2-3 times a week (4)
- ❍ Once a week (5)
- ❍ 1-3 times a month (6)
- ❍ Less than once a month (7)

Q5 How long have you been attending traditional 12 step meetings? *Please use numbers only (example, 7 days, 4 weeks, 9 months, etc.)

day(s) (1)
week(s) (2)
month(s) (3)
year(s) (4)

Q6 *In the sections that follow, please mark the extent to which you either agree or disagree with the following statements. When answering the questions below, please think about your interactions and experiences in traditional 12 step meetings where you meet, discuss, listen, and share with others in person.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
The group members spend time getting to know each other (1)	❍	❍	❍	❍	❍
The members make me feel a part of the group (2)	❍	❍	❍	❍	❍
I look forward to coming to the group meetings (3)	❍	❍	❍	❍	❍
I do not feel part of the group (4)	❍	❍	❍	❍	❍
The members make me feel liked (5)	❍	❍	❍	❍	❍
My absence would not matter to the group (6)	❍	❍	❍	❍	❍
I can trust group members (7)	❍	❍	❍	❍	❍
We can say anything in this group without worrying (8)	❍	❍	❍	❍	❍
I prefer not to spend time with members of the group	❍	❍	❍	❍	❍

(9) The members made me feel involved in the group (10)	❍	❍	❍	❍	❍
Some of the group members could become my friends (11)	❍	❍	❍	❍	❍
The group atmosphere is comfortable (12)	❍	❍	❍	❍	❍

Q7 Attending traditional 12 step meetings,

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
Helps me meet others desiring a clean & sober network (1)	❍	❍	❍	❍	❍
Makes it easy for me to adopt a clean & sober network (2)	❍	❍	❍	❍	❍
Helps me stay in contact with others in recovery (3)	❍	❍	❍	❍	❍
Enables me to meet others in a similar situation (4)	❍	❍	❍	❍	❍
Make me feel accountable for my recovery (5)	❍	❍	❍	❍	❍
Motivates me to stay clean & sober (6)	❍	❍	❍	❍	❍

Q8 We would like you to continue thinking about your life in recovery and attending traditional 12 step meetings in person. *In this next section, please use the following words and phrases to describe it. For example, if you think that your experience with traditional 12 step meetings has been very miserable, check the space right next to the word "miserable." If you think it has been very enjoyable, check the space right next to "enjoyable." If you think it has been somewhere in between, put a check where you think it belongs. Please put a check on every line.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
miserable:enjoyable (1)	❍	❍	❍	❍	❍	❍	❍
hopeful:discouraging (2)	❍	❍	❍	❍	❍	❍	❍
free:tied down (3)	❍	❍	❍	❍	❍	❍	❍
empty:full (4)	❍	❍	❍	❍	❍	❍	❍
interesting:boring (5)	❍	❍	❍	❍	❍	❍	❍
rewarding:disappointing (6)	❍	❍	❍	❍	❍	❍	❍
doesn't give me much chance to stay clean & sober:brings out the best in me (7)	❍	❍	❍	❍	❍	❍	❍
lonely:friendly (8)	❍	❍	❍	❍	❍	❍	❍
hard:easy (9)	❍	❍	❍	❍	❍	❍	❍
worthwhile:useless (10)	❍	❍	❍	❍	❍	❍	❍

Q9 Now, think about how the support you receive aids in SOLVING PROBLEMS when you attend traditional 12 step meetings in person.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
helpful:hurtful (1)	❍	❍	❍	❍	❍	❍	❍
useless:useful (2)	❍	❍	❍	❍	❍	❍	❍
ignorant:knowledgeable (3)	❍	❍	❍	❍	❍	❍	❍
selfish:generous (4)	❍	❍	❍	❍	❍	❍	❍

Q10 Now, think about the type of support you receive from others while attending traditional 12 step meetings. Please select the following words and phrases that describe your RELATIONSHIPS.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
supportive:unsupportive (1)	❍	❍	❍	❍	❍	❍	❍
upsetting:reassuring (2)	❍	❍	❍	❍	❍	❍	❍
comforting:distressing (3)	❍	❍	❍	❍	❍	❍	❍
encouraging:discouraging (4)	❍	❍	❍	❍	❍	❍	❍

Q11 Think about your life in recovery and attending traditional 12 step meetings in person. Please use the following words and phrases to describe the EMOTIONAL SUPPORT you receive.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
sensitive:insensitive (1)	❍	❍	❍	❍	❍	❍	❍
heartless:compassionate (2)	❍	❍	❍	❍	❍	❍	❍
considerate:inconsiderate (3)	❍	❍	❍	❍	❍	❍	❍
misunderstanding:understanding (4)	❍	❍	❍	❍	❍	❍	❍

Q12 *In the next few sections, please mark the extent to which you either agree or disagree with the following statements.

	Disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Agree 7 (7)
For staying clean & sober, traditional 12 step meetings are very effective (1)	❍	❍	❍	❍	❍	❍	❍
For staying clean & sober, traditional 12 step meetings are very helpful (2)	❍	❍	❍	❍	❍	❍	❍
For staying clean & sober, traditional 12 step meetings are very appropriate (3)	❍	❍	❍	❍	❍	❍	❍
Traditional 12 step meetings are very accessible (4)	❍	❍	❍	❍	❍	❍	❍
I feel like I can get help immediately when I need it (5)	❍	❍	❍	❍	❍	❍	❍
In traditional 12 step meetings, I can say personal things without others knowing who	❍	❍	❍	❍	❍	❍	❍

I really am (6)							
I can say things anonymously in traditional 12 step meetings (7)	❍	❍	❍	❍	❍	❍	❍
There is less embarrassment being anonymous in traditional 12 step meetings (8)	❍	❍	❍	❍	❍	❍	❍
I always get an opportunity to express myself in traditional 12 step meetings (9)	❍	❍	❍	❍	❍	❍	❍
No one knows my true identity in traditional 12 step meetings (10)	❍	❍	❍	❍	❍	❍	❍
I feel I have a lot in common with others in this recovery group (11)	❍	❍	❍	❍	❍	❍	❍
I find it easy to identify with this recovery group (12)	❍	❍	❍	❍	❍	❍	❍
I find that my values and the values of those in this recovery group are very similar (13)	❍	❍	❍	❍	❍	❍	❍
I view my	❍	❍	❍	❍	❍	❍	❍

recovery groups' problems as my problems (14)							

Q13 Do you attend online 12 step meetings to help you in the recovery process? If no, please do your best to complete the rest of the survey based on past experiences and what you know and or feel about online meetings.

- ❍ Yes (1)
- ❍ No (2)

Q14 If you DO NOT attend online 12 step meetings, would you please share with us why not? Please answer as honestly and as best you can in the space provided below.

Q15 Please check all that apply. I frequently use IntheRooms.com to...

- ❑ Message my sponsor, sponsee or other members in recovery (1)
- ❑ Attend online meetings (2)
- ❑ Participate in discussion boards (3)
- ❑ Read discussion boards or blogs (4)
- ❑ Access recovery-related information; for example meeting times or locations (5)
- ❑ Instant message with my sponsor, sponsee or others members in recovery (6)
- ❑ Other (7) _____
- ❑ None of the above (8)

Q17 How often do you attend online 12 step meetings?

- ❍ More than once a day (1)
- ❍ Everyday (2)
- ❍ 4-5 times a week (3)
- ❍ 2-3 times a week (4)
- ❍ Once a week (5)
- ❍ 1-3 times a month (6)
- ❍ Less than once a month (7)

Q16 While attending online 12 step meetings, to what extent do you instant message other attendees during the meeting?

	Very Infrequently (1)	Infrequently (2)	Neither (3)	Frequently (4)	Very Frequently (5)
I instant message others _____ during online meetings. (1)	❍	❍	❍	❍	❍

Q18 How long have you been attending online 12 step meetings? *Please use numbers only (example, 7 days, 3 weeks, 2 months, etc.)

day(s) (1)
week(s) (2)
month(s) (3)
year(s) (4)

Q19 *In the sections that follow, please mark the extent to which you either agree or disagree with the following statements. When answering the questions below, please think about your interactions and experiences in online 12 step meetings where you meet, discuss, listen, and share with others online.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
The group members online spend time getting to know each other (1)	❍	❍	❍	❍	❍
The members make me feel a part of the group online (2)	❍	❍	❍	❍	❍
I look forward to coming to the online group meetings (3)	❍	❍	❍	❍	❍
I do not feel part of the group online (4)	❍	❍	❍	❍	❍
The members make me feel liked online (5)	❍	❍	❍	❍	❍
My absence would not matter to the group online (6)	❍	❍	❍	❍	❍
I can trust group members online (7)	❍	❍	❍	❍	❍
We can say anything in this group	❍	❍	❍	❍	❍

online without worrying (8)					
I prefer not to spend time with members of the group online (9)	❍	❍	❍	❍	❍
The members made me feel involved in the group online (10)	❍	❍	❍	❍	❍
Some of the group members online could become my friends (11)	❍	❍	❍	❍	❍
The online group atmosphere is comfortable (12)	❍	❍	❍	❍	❍

Q20 Attending online 12 step meetings,

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
Helps me meet others desiring a clean & sober network (1)	❍	❍	❍	❍	❍
Makes it easy for me to adopt a clean & sober network (2)	❍	❍	❍	❍	❍
Helps me stay in contact with others in recovery (3)	❍	❍	❍	❍	❍
Enables me to meet others in a similar situation (4)	❍	❍	❍	❍	❍
Make me feel accountable for my recovery (5)	❍	❍	❍	❍	❍
Motivates me to stay clean & sober (6)	❍	❍	❍	❍	❍

Q21 We would like you to continue thinking about your life in recovery and attending online 12 step meetings. *In this next section, please use the following words and phrases to describe it. For example, if you think that your experience with online 12 step meetings has been very miserable, check the space right next to the word "miserable." If you think it has been very enjoyable, check the space right next to "enjoyable." If you think it has been somewhere in between, put a check where you think it belongs. Please put a check on every line.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
miserable:enjoyable (1)	❍	❍	❍	❍	❍	❍	❍
hopeful:discouraging (2)	❍	❍	❍	❍	❍	❍	❍
free:tied down (3)	❍	❍	❍	❍	❍	❍	❍
empty:full (4)	❍	❍	❍	❍	❍	❍	❍
interesting:boring (5)	❍	❍	❍	❍	❍	❍	❍
rewarding:disappointing (6)	❍	❍	❍	❍	❍	❍	❍
doesn't give me much chance to stay clean & sober:brings out the best in me (7)	❍	❍	❍	❍	❍	❍	❍
lonely:friendly (8)	❍	❍	❍	❍	❍	❍	❍
hard:easy (9)	❍	❍	❍	❍	❍	❍	❍
worthwhile:useless (10)	❍	❍	❍	❍	❍	❍	❍

Q22 Now, think about how the support you receive aids in SOLVING PROBLEMS when you attend 12 step meetings online.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
helpful:hurtful (1)	❍	❍	❍	❍	❍	❍	❍
useless:useful (2)	❍	❍	❍	❍	❍	❍	❍
ignorant:knowledgeable (3)	❍	❍	❍	❍	❍	❍	❍
selfish:generous (4)	❍	❍	❍	❍	❍	❍	❍

Q23 Now, think about the type of support you receive from others while attending 12 step meetings online. Please select the following words and phrases that describe your RELATIONSHIPS.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
supportive:unsupportive (1)	❍	❍	❍	❍	❍	❍	❍
upsetting:reassuring (2)	❍	❍	❍	❍	❍	❍	❍
comforting:distressing (3)	❍	❍	❍	❍	❍	❍	❍
encouraging:discouraging (4)	❍	❍	❍	❍	❍	❍	❍

Q24 Think about your life in recovery and attending online 12 step meetings. Please use the following words and phrases to describe the EMOTIONAL SUPPORT you receive.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
sensitive:insensitive (1)	❍	❍	❍	❍	❍	❍	❍
heartless:compassionate (2)	❍	❍	❍	❍	❍	❍	❍
considerate:inconsiderate (3)	❍	❍	❍	❍	❍	❍	❍
misunderstanding:understanding (4)	❍	❍	❍	❍	❍	❍	❍

Q25 *In the next few sections, please mark the extent to which you either agree or disagree with the following statements.

	Disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Agree 7 (7)
For staying clean & sober, online 12 step meetings are very effective (1)	❍	❍	❍	❍	❍	❍	❍
For staying clean & sober, online 12 step meetings are very helpful (2)	❍	❍	❍	❍	❍	❍	❍
For staying clean & sober, online 12 step meetings are very appropriate (3)	❍	❍	❍	❍	❍	❍	❍
Online 12 step meetings are very accessible (4)	❍	❍	❍	❍	❍	❍	❍
I feel like I can get help immediately when I need it online (5)	❍	❍	❍	❍	❍	❍	❍
Online, I can say personal things without others knowing who I really am (6)	❍	❍	❍	❍	❍	❍	❍
I can say things	❍	❍	❍	❍	❍	❍	❍

anonymously online (7)							
There is less embarrassment being anonymous online (8)	❍	❍	❍	❍	❍	❍	❍
I always get an opportunity to express myself online (9)	❍	❍	❍	❍	❍	❍	❍
No one knows my true identity online (10)	❍	❍	❍	❍	❍	❍	❍
I feel I have a lot in common with others in this online recovery group (11)	❍	❍	❍	❍	❍	❍	❍
I find it easy to identify with this online recovery group (12)	❍	❍	❍	❍	❍	❍	❍
I find that my values and the values of those in this online recovery group are very similar (13)	❍	❍	❍	❍	❍	❍	❍
I view my online recovery groups' problems as my problems (14)	❍	❍	❍	❍	❍	❍	❍

Q33 *This is the last page of the survey*

Q26 Are you male or female?
- ❍ Male (1)
- ❍ Female (2)

Q27 Please mark to what extent you are experienced with the Internet.

	Very Inexperienced (1)	Inexperienced (2)	Neither Experienced nor Inexperienced (3)	Experienced (4)	Very Experienced (5)
I am _____ with the Internet. (1)	❍	❍	❍	❍	❍

Q28 How old are you? *Please represent using numbers only (example, 21, 38, 66, etc.)

Q29 Approximately how far (in miles) do you live from your nearest 12 step meeting location? *Please use numbers only (example, 4, 25, etc.)

Q30 *Please mark the extent to which you either agree or disagree with the following statements.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
I have a desire to stop drinking/using (1)	❍	❍	❍	❍	❍
I have admitted my life is unmanageable and I am powerless over my addiction (2)	❍	❍	❍	❍	❍
I am not commited to my recovery (3)	❍	❍	❍	❍	❍

Q31 Do you attend 12 step meetings on your own free will?

❍ Yes (1)

❍ No (2)

Q32 How long have you been in recovery? Please use numbers only (example, 1 day, 90 days, 7 months, etc.)

day(s) (1)

month(s) (2)

year(s) (3)

Q35 This completes the survey. *Please click the arrow >> to ensure your responses will be submitted*. Thank you for your time! If you have any comments or questions please feel free to email the primary researcher Melissa Murphy at melissa.murphy01@gmail.com.

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